THE POSITIVE AND NEGATIVE ASPECTS OF STUDENT INVOLVEMENT ON ACADEMIC ACHIEVEMENT

By

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
December, 2010

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OF STUDENT INVOLVEMENT ON

ACADEMIC ACHIEVEMENT

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ACKNOWLEDGMENTS

To God who makes all things possible

I want to thank the best committee in the world! Dr. Fuqua and Dr. Perry have the patience of Job. Thank you for all your prayers, love, and support over this journey. You two are truly great role models. Thank you Dr. Miller for being the first one to let me know that research can be fun and anything I see of interest. To Dr. Davis, Wow! Your trust and encouragement along the way will be remembered forever.

Thank you to the village of supporters in my life: Sharon, Shing, Yoko, Tiffany (study buddy), Lori, Celeste, Evan, Brent, Shirley, Lynne, Millicent, Royce, Sarah[2], Judy, Roger, Linda and my Cimarron Business and Professional Women sisters. Without the Young Careerist Program, I would not have taken the time to set such a high goal. If I have forgotten someone, please charge it to my head and not to my heart.

I wish to thank my Mt. Zion family: Pastor Miller, Dr. Drain, Mr. and Mrs. Lawrence, Ms. Patsy, Ms. Phyllis, Ushers, Jeremy, Sara, and my Master Life Series sisters, for your love and prayers.

Virgil and Bob, words cannot describe more how thankful I am to know you.

I owe a debt of gratitude to Diane and Dr. Dickman. Thank you, Diane, for taking my first graduate course with me and letting me know about a program called Counseling and Student Personnel. To the late Marcia Dickman who taught me how to love students. She made anyone who came to her office feel like a million bucks! I hope I live to be half

the teacher you were. I also wish to thank the cadre of students who trusted in me to give them advice and guide them over the years.

Kelly, where would I be without you? You saw that this would be a good idea and that the committee would be fantastic. I tried to leave but you said this would be the best place to do it. The laughs will be remembered forever. We stuck it out and dreamed of this day. Your day will come. Hang in there!

Lastly, I wish to express my gratefulness to my Dad, Sylvia, Gwen, and Geneva. There were times when you were my Mother on Earth. While I miss Mom, deeply, you all stood by me during the good and the bad times. I love you with all my heart. Blessings on you.

Furthermore, I did this is for my nieces, nephews, and Amy.

TABLE OF CONTENTS

Chapter Page

I. INTRODUCTION 1

Statement of the Problem 2
Purpose of the Study 3
Research Questions 3
Significance of the Study 3
Definition of Terms 4
Limitations 4
Organization of the Study 5

II. REVIEW OF LITERATURE 6

Introduction 6
Involvement vs. engagement 6
Theories and models 7
Chickering's Vector Model of Student Development 8
Astin's Theory of Student Involvement 9
Tinto's Longitudinal Model of Student Departure 11
Pace's Model of Student Development 14
Pascarella's General Causal Model for Assessing the Effects of Differential Environments on Student Learning and Cognitive Development 14
Swail's Five Components of the Student Retention Framework Model 18
Weidman's Undergraduate Socialization Model 19
Instruments in the field 21
National Survey of Student Engagement (NSSE) 21
Student Experiences Questionnaire (CSEQ) 22
Cooperative Institutional Research Program (CIRP) 23
Student Development Task Lifestyle Assessment (SDTLA) 24
General Education Academic Instruments 25
Results of previous studies 26
Academic Achievement 27
Student Involvement 28
First year studies vs. other years 30
Other studies 31
Summary 32

Chapter Page

III. METHODOLOGY 35

Research Participants 35
Design 36
Measures 36
Procedure 41
Data Analysis 42

IV. RESULTS 43

Scale Development 43
Item Analysis 43
Interscale Correlations 45
Exploratory Factor Analysis 47
Student Involvement Inventory Scale Scores to Factor Scores 51
Multiple Correlations Analysis with each Academic Measure 53
Relationships of Student Involvement Inventory with Demographic Variables 54
Summary 57

V. DISCUSSION 59

Introduction 59
Research Questions 59
Research Question 1 59
Psychometric Analysis 59
Conceptual Analysis 60
Research Question 2 62
Conclusions 65
Limitations 68
Program Recommendations 68
Recommendations for Future Research 70

REFERENCES 71

APPENDICES 83

APPENDIX A: INVOLVEMENT INDICATORS 84

APPENDIX B: STUDENT DEVELOPMENT TASK LIFESTYLE ASSESSMENT 107

APPENDIX C: STUDENT INVOLVEMENT INVENTORY (2007) 109

APPENDIX D: STUDENT INVOLVEMENT INVENTORY (2009) 115

Chapter Page

APPENDIX E: LETTER NOTIFICATION TO STUDENTS 124

APPENDIX F: EMAIL NOTIFICATION TO STUDENTS.....126

APPENDIX G: INSTITUTINAL REVIEW BOARD.....128

APPENDIX H: FACTOR LOADINGS FOR SATISFCTION ITEMS 130

LIST OF TABLES

Table Page

1. Student Involvement Scales Activity and Satisfaction Item Reliabilities 44

2. Correlations Among Student Involvement Activity Scales.....45

3. Correlations Among Student Involvement Satisfaction Scales 46

4. Correlations Among Student Involvement Activity and Satisfaction Scales 46

5. Factor Loadings for Exploratory Principal Axis Analysis with Oblimin Rotation and Communalities.....49

6. Factor Correlation Matrix 51

7. Correlations Between Student Involvement Activity Scales and Factor Scores 52

8. Correlations Between Student Involvement Satisfaction Scales and Factor Scores.....52

9. Multiple Correlation Analysis with Each Academic Measure from the SII Activity Subscales.....53

10. Multiple Correlation Analysis with Each Academic Measure from the SII Satisfaction Subscales.....54

11. Multivariate Group Differences by Class 55

12. Means and Standard Deviations for TOTSCISAT 56

13. Means and Standard Deviations for TOTCRFSAT.....56

14. Means and Standard Deviations for TOTSOCSAT.....56

LIST OF FIGURES

Figure Page

1. Tinto's Longitudinal Model of Student Departure 12

2. Pace Student Development Quality of Effort Model of college impress.....16

3. General Causal Model for Assessing the Effects of Differential Environments on Student Learning and Cognitive Development.....17

4. Five Components of the Student Retention Framework.....18

5. A Conceptual Model of Undergraduate Socialization.....20

6. Scree Plot for 21 Item Student Involvement Inventory 48

CHAPTER I

INTRODUCTION

While attending college, many students choose to get involved in the "college experience" and their involvement of students on campus has been positively linked to graduating from college (Pascarella & Terenzini, 2005). Moreover, the Study Group on the Conditions of Excellence in American Higher Education (1984) concluded that

> perhaps the most important [condition] for purposes of improving undergraduate education is student involvement…the more time and effort students invest in their learning process and the more intensely they engage in their own education, the greater will be their growth and achievement, their satisfaction with their educational experiences, and their persistence in college (p. 17).

An institution's ethos can play a major part in how students are involved on campus (Kuh, 1995). The institution can exert a substantial influence regarding how a student gets involved. For example, students at liberal arts colleges may have a different experience than those at research institutions (Pike, Kuh, & Gonyea, 2003). When choosing a college, Pike et al. (2003), suggested that students and parents should look at the mission statement of a college to see how the students are involved.

Student involvement is multidimensional. A student can be involved in a myriad of activities on or off campus, with some experiences being negative (Guiffrida, 2004) or being positive (Pascarella & Terenzini, 2005). Many campuses have over 300 activities and organizations for students to explore. Of course, students do not have time to be active in every organization on campus if they hope to be successful academically. Therefore, they need to take care in choosing which areas will benefit them most.

Student involvement has also been related to academic achievement (Astin, 1999; Huang & Chang, 2004; Pascarella & Terenzini, 1991; Ullah & Wilson, 2007). Students must be cognizant of the resources on campus they can use which lead to academic success. Given that most students will leave an institution within the first 10 weeks of school (Blanc, Debuhr, & Martin, (1983), it is important to explore and understand student involvement sooner than later in a student's college tenure.

Statement of the Problem

Students should be involved while in college to increase persistence (Tinto, 1993). However, not all student involvement leads to positive outcomes (Guiffrida, 2004). By neglecting academics, the problem from this researcher's perspective is that there comes a tipping point when too much student involvement may lead to academic failure. In other words, students who are too involved and do not find the balance between academics with out of class experiences suffer academically, and academic failure is often (typically) followed by leaving college due to academic suspension. What is not known that this study identifies as a need to address is that some of the academic problems may stem from students who do not learn to use resources on campus outside the classroom. For example, students who do not visit the tutoring center, writing labs, or

math labs when they are having academic problems, and or do not use the counseling center, career resource center, or multicultural center for social problems, may not graduate.

Purpose of the Study

The purpose of the study is to determine if different types of student involvement exist, and if so, determine if they are positively related to academic achievement. This relationship can be determined by looking at the patterns of student involvement that differentiate students on demographic variables and relate those students to areas of academic achievement.

Research Questions

Specifically, the following research questions will guide this study:

1. What is the empirical structure of college student involvement in various activities outside the classroom? and
2. How do the different structures of student involvement relate to dimensions of student academic achievement?

Significance of the Study

It is widely held that student involvement is a positive factor that leads to student persistence (Pascarella & Terenzini, 2005). If advisors knew what students were involved in and how much time students were investing in each activity outside the classroom, they could then counsel students to try different organizations, curtail their involvement in a few organizations, and/or better manage their time. We need multiple ways for

advisors to communicate to students so that they can help them balance, extracurricular activities, time, and academics to successfully graduate from college.

Academic affairs and student affairs professionals can use the information in this study to determine where students are spending their time outside the classroom and if this time is impacting their academic achievement. A possibility exists that students can become excessively involved so that involvement negatively impacts their academic achievement (Guiffrida, 2004). In an age where funding for higher education from state government is shrinking, administrators need to fund the areas on campus were students are experiencing the most constructive support in achieving their academic and developmental goals.

Likewise, divisions of enrollment management can use this information to inform students during orientation and enrollment days about resources, organizations, and activities available on campus. Additionally, this study will test the assumptions to see if students are spending their time in areas traditionally seen in research as leading to higher grade point averages and retention.

Definition of Terms

Academic achievement - is defined as cumulative grade point average (GPA) (Ullah & Wilson, 2007).

Campus resources and facilities (CRF) – resources on campus such as tutoring centers, writing labs, gymnasium, library, computer labs, to help students be successful on campus or facilities that students can use such as the gymnasium, etc.

Interactionist Model – is a model by Vincent Tinto that focuses on students interactions both academically and socially with the institution (Tinto, 1993).

Intrusive Advising – Intervening early with a student, follow –up contact with the student and coming up with a plan for success for the student (Garing, 1993; Escobedo, 2007).

Proximity to campus (PROX) – convenience to campus

Satisfaction- the "customer's fulfillment response" (Rust &Oliver, 1994)

Social connections (CON) – relationships that students have and how students socialize on or off campus

Structured campus involvement (SCI) – out of the classroom campus involvement that is part of the university environment

Student involvement - is defined as "the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1999, p. 518). More succinctly, student involvement is the behaviors that students exhibit as they interact on campus and off campus during their college tenure. The definition will be used throughout this study.

Limitations

Data were collected from only one institution, thus potentially restricting the generalizability of this study's findings. This institution is located in the southwestern region of the United States.

Organization of the Study

The topic for this paper is presented in five chapters. The first chapter is the introduction. The second chapter is a review of the literature addressing student involvement and engagement. The third chapter is a presentation of the methodology employed. The methodology section will include discussion of the subjects, the

instrument used, and the research design and procedure. Chapter IV is the analyses of the data and results; concluding with Chapter V which also includes recommendations for future research.

CHAPTER II

REVIEW OF LITERATURE

This chapter is a presentation of a review of the literature regarding student involvement. It includes five sections: 1) the use of the terms involvement vs. engagement 2) a discussion on theories and models in the area, 3) instruments used to measure student involvement, 4) results of previous studies, and 5) academic achievement. This literature review will explore the theoretical and empirical knowledge basis regarding student involvement and its relationship with academic achievement.

Involvement vs. engagement

Within the literature, student involvement and student engagement are used interchangeably to describe the same construct or two overlapping constructs. Many authors use the terms involvement, engagement, and integration with the precise meaning of these terms evolving over the years (Wolf-Wendel, L., Ward, K. & Kinzie, J., 2009). This review will primarily focus on student involvement, but cannot exclude engagement. Engagement is also important for its emphasis not only on what the student does but, in addition, what the institution can do to increase campus engagement and thereby student retention (Wolf-Wendel, et al., 2009).

Student involvement includes the behaviors, actions, and energy that students invest in on- or-off campus that revolve around college life while they are enrolled at the university or college (Astin, 1999). For example, excluding classroom time, the time students spend visiting faculty during office hours, attending campus organization meetings, or working at a local restaurant, are considered to be central dimensions of student involvement. A list of involvement indicators with the references found in the literature are presented in Appendix A.

Wolf-Wendel, et al., (2009) found involvement has contributed to research and practice in the following ways:

1) It emphasized academic, out-of-class settings and extracurricular activities;
2) It focused on the individual and the activities the individual does to become involved;
3) The concept has been used on campuses to develop programming and create offices to encourage student involvement to provide more and more effective opportunities for students to become involved in activities as part of a successful college experience; and
4) It has been linked via research to almost every positive outcome of college (p.412).

The research has lead to many theories and models on student involvement.

Theories and models

Several theories have been posited that are associated with concepts that attempt to explain the process of human development as it applies to the growth and development of college students at any age (Bloland, Stamatakos, & Rogers (1994, p. vii). The most popular authors in the area of student involvement and development include: Arthur Chickering, Alexander W. Astin, Vincent Tinto, Earnest T. Pascarella, Patrick Terenzini, C. Robert Pace and George D. Kuh. These researchers have had an inordinate impact in defining and measuring student involvement. Over the last 40 years they have, collectively, studied the trends in student development and involvement, from the "flower children" to the "millennials" with Astin, Pascarella and Tinto being in the top ten of authors cited in higher education literature in general (Budd, 1990). The following provides brief discussion on the conceptualization of student development.

Arthur Chickering

While concentrating on traditional aged college students and four year institutions, the person who has the greatest influence on integrating the vast information on college student development and framing it is Arthur Chickering (Pascarella & Terenzini, 2005). Chickering's Vector Model of Student Development (Chickering, 1969; Chickering & Reisser, 1993) has seven vectors of development for students as they transition into adulthood. These vectors are developing competence, managing emotions, developing autonomy, establishing identity, freeing interpersonal relationships, developing purpose, and developing integrity (Widick, Parker, & Knefelkamp, 1978). These developmental dimensions guide universities with purposeful programming for students. In addition, the vectors help staff in assessing where attention is needed

(Widick, et al., 1978). However, according to Chickering and Reisser, (1993), "faculty and staff seldom ask whether the activities and experiences offered by the college environment actually facilitate academic and personal development", p. 283. In other words, there is a cry for better assessment in student affairs and academic affairs of what actually takes place on campus and also to re-ask the questions "why are we doing this activity or assignment, and is it effective?"

Another key point about Chickerings' seven vectors model is that it may help explain why some students choose the particular activities they get involved in during their tenure at the university. Depending on where they are developmentally, students may decide to participate in some events and avoid others. However, there is an assumption among professionals working in university settings that students will have enough autonomy to seek out help if they need it. This may be a faulty assumption when applied to freshmen. Universities' efforts concerning retention clearly reflect effective involvement and may be a key factor in student retention. But does this effort generalize to other and different types of institutions as well as students?

More research is critically needed regarding community colleges, non-traditional age, and minority students related to student involvement. Patton, McEwen, Rendon and Howard-Hamilton (2007) note the missing discussion of race or ethnicity in relation to the seven vectors even though racial identity literature was available at the time of work by Chickering and Reisser. Also missing is attention to spiritual and social development. The strength of Chickering's work is the ability to cover the "big picture" with the primary weakness being that the work is not detailed enough (Widick, et al., 1978). Capitalizing on Chickering's work Astin deviled into student involvement.

Alexander Astin

Alexander W. Astin (1999, p.518) says “student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience,”, and he uses this description as the basis for his theory of student involvement. He has a model traditionally known as the Input-Environment-Output model (IEO) that is widely cited, in the literature. Specifically, Astin has five postulates that describe student involvement by stating that:

> 1) mental and physical energy must be invested in objects (activities, tasks, and people)
>
> 2) involvement is a continuous concept—with different amounts of energy applied by different student tasks,
>
> 3) involvement has both qualitative and quantitative characteristics
>
> 4) the amount of development and learning is directly proportional to the quantity and quality of involvement; and
>
> 5) the effectiveness of any practice or policy is related to its capacity to increase student involvement (Astin, 1999).

Astin (1999) further suggested that Postulates 4 and 5 are important educational postulates because they provide pointers for crafting more effective informative programs for students. Student involvement is generally viewed as a positive part of the college experience and is the reason why institutions spend resources on campus activities (Wolf-Wendel & Ruel, 1999). Indentifying meaningful activities that a student can get involved

in, especially for a student who otherwise has not found anything to connect with in the university, is very effective; this also supports Tinto's concept of "student departure".

In contrast, "application of involvement theory does not easily take into account the diverse backgrounds, needs, and external responsibilities of all of today's students," (Wolf-Wendel & Ruel, 1999, p. 38). For example, today's students have taken on the pressure of bills related to cell phones, cars, car insurance, and a false "Paris Hilton" or video star lifestyle. In addition to the academic demands of a college degree, today's student may face the temptation of fast money from lottery tickets, casinos, and credit cards. Yet, key to Tinto's work is student involvement.

Vincent Tinto

Tinto is frequently cited for his research on student persistence (Metz, 2004). Rather than follow the psychological model of understanding students, Tinto applies social anthropological studies of rites of passage (Wagenaar, 1988). Tinto's 1975 model on academic and social integration (Interactionalist Theory or the Longitudinal Model of Student Dropout), leads to his theoretical model of attrition and persistence in a Longitudinal Model of Institutional Departure represented in Figure 1. Tinto says that if students are not socially and academically integrated into the university, they are more likely to leave.

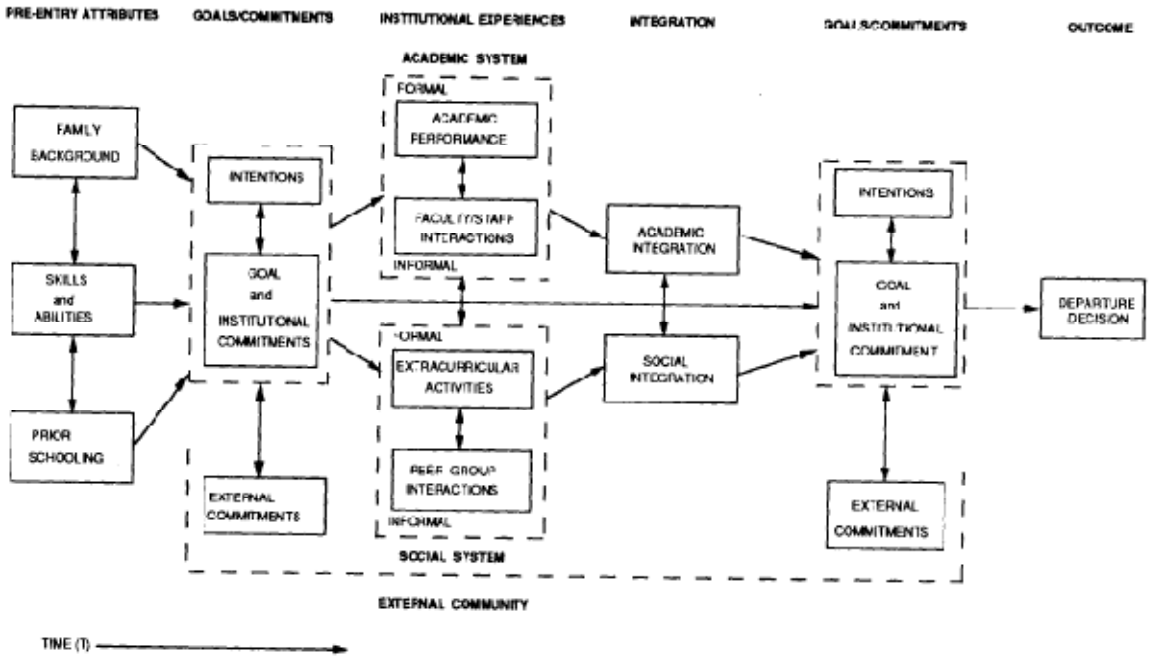

Figure 1. Tinto's Longitudinal Model of Student Departure. From *Leaving college: Rethinking the causes and cures of student attrition* (p. 114), by Tinto, V. (1993), Chicago: University of Chicago Press. Copyright, 1993 by University of Chicago. Reprinted with permission.

According to Figure 1, Tinto further explained the model by dividing the model into six key areas:

> a) pre –entry attributes (prior schooling and family background , b) goals/commitment (students aspirations and institutional goals c) institutional experiences (academics, faculty interaction, co-curricular involvement, and peer group interaction), d) integration (academic and social), e) goals/commitment (intentions and external

commitments) and f) outcome (departure decision-graduate, transfer, dropout).

The main reason for listing Tinto's theory here is Area C) institutional experiences – as defined above. Academics, faculty interaction, co-curricular involvement, and peer group interaction are cited many times as indicators of involvement on campus. Likewise, since student involvement is linked with attrition and persistence in college, administrators need to find more ways of measuring effective student involvement to help students graduate. Guiffrida (2003) saw that African American student organizations on predominately white campuses not only helped with social integration but also faculty interaction, which is deemed as important to academic success. Tinto's theory is very important to everyday practice for advisors.

Advisors have many advisees in higher education and the demands to help with enrollment and retention are ever increasing. If advisors had a tool to give them an accurate assessment of where their students were involved, they could advise or explore better options for their students' use of time. The assessment will also help the student see where they are spending their time and energy.

One approach to accomplishing this assessment would be to give a brief survey to students after midterm exams or early in the fall and/or spring semester with the goal of decreasing the number of students facing probation or suspension. A key to engaging in intrusive advising is early intervention with planned follow-up contact to help students navigate solutions to academic problems (Escobedo, 2007).

Boyle (1989) highlighted several articles that partially validates Tinto's model. However, while most have positive affirmation of Tinto's model, others have questioned

its relevance to all students. As an example, Rendon, Jalomo and Nora (2000) explain that Tinto's model does not take into account nontraditional and minority students and their difficulties with getting involved on campus. They also bring to light that many of the theories of student involvement including Tinto's model were developed with White, middle to upper income families in mind. Tierney (1992) also disagreed with Tinto's "rites of passage" concept citing that minority students are going from one culture to another where as "rites of passage" are within one culture. He also notes other anthropological problems and interactionist problems with the model, such as Native Americans' perspective on family and corporation for success.

Attinasi (1989) offered that Tinto's and other models fail to consider the student's own perceptions of the attrition process by using correlational studies more than qualitative methods. He wanted to hear more from student's perceptions in their own voice. He found that mentors and role models help Mexican American students go to college and succeed in college.

Also, in Walpole's (2005) review of Braxton, Hirschy, and McClendon's book *Understanding and Reducing College Student Departure*, she notes the lack of quantitative support for Tinto's model on residential and commuter institutions. Therefore, they do propose revisions to the model. While Tinto is concerned with broad areas of academic and social integration, Pace is concerned with the quality of the effort taken by students.

C. Robert Pace

In Pace (1979) and later Pace (1984) in his study *Measuring the quality of college student experiences: An account of the development and use of the College Student*

Experience Questionnaire he outlines a concept he called the "quality of effort". With his concept, students are expected to do something (be involved) with what the institution offers focusing on the accountability of achievement. In addition, Pace emphasizes areas where the student takes the initiative to get involved is his "Model of Student Development". It is this *effort* that students expend and the *quality of that effort* that Pace claims is the most critical factor for academic outcomes (Ethington & Horn, 2007). Originally presented in Pace (1979), a clearer depiction of the model is presented in Figure 2. This model is designed for four-year institutions. A Community College Student Experiences Questionnaire (CCSEQ) was designed in 1990 to focus the model on two-year institutions. Further research is uncovered by Pascarella and Terenzini.

Pascarella and Terenzini.

Earnest Pascarella and Patrick Terenzini, both separately and together, use Tinto and Astin's models quite frequently in their research on college and student involvement. In their 1979 work, Pascarella and Terenzini defined student involvement in terms of extracurricular activities, social and academic integration, and informal contact with faculty and peers. Over the past 40 years these gentlemen have given student affairs professionals and other campus administrators the information and ideas to promote programming for better retention and student development throughout the university. Data gathered through their studies and research for *How college affects students: findings from twenty years of research (*Pascarella and Terenzini, *1991)* and *How college affects students Vol. 2 a third decade of research (*Pascarella and Terenzini, 2005), contributed much to the field. Taylor (2009) says "these studies are the building blocks

that create the foundation for what is understood about the student college experience", p. 63.

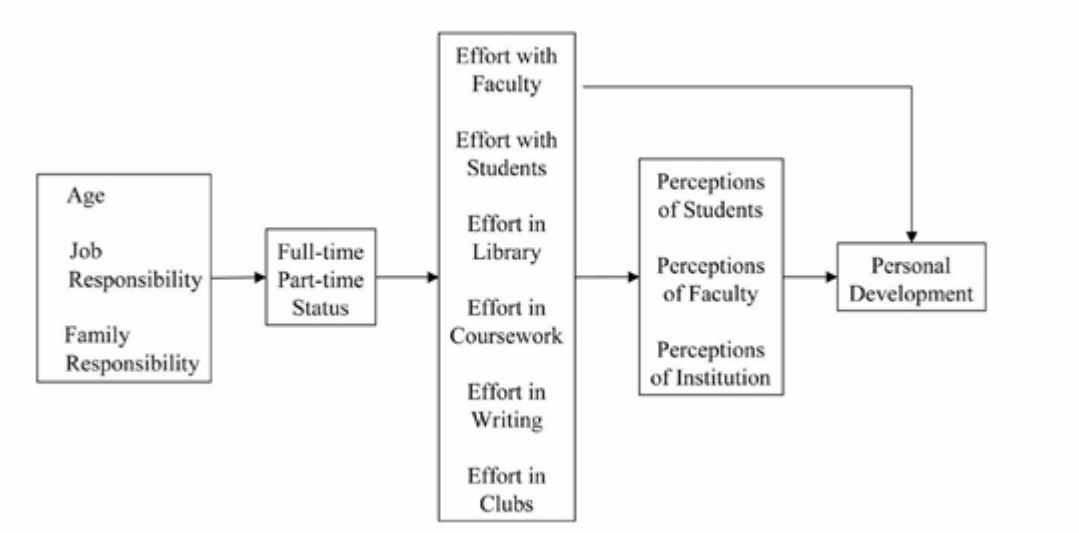

Figure 2. Pace's Model of Student Development and proposed college impress depicting Quality of Effort as shown by Ethington & Horn (2007).

In their latest book, Pascarella and Terenzini (2005), show Pascarella's Model for Assessing the Effects of Differential Environments on Student Learning and Cognitive Development (see Figure 3). A synthesis and critical review of the literature of college environments on cognitive development can be found in Pascarella (1985). During this review he outlines the bases for conceptualizing his casual model. The model shows how five major blocks (structural and organizational characteristics of the institution, interactions with agents of social change, pre-college characteristics, institutional environment, and quality of student effort,) have an impact on learning and cognitive development. Again, the interactions with agents of socialization outside the classroom for student involvement may have an effect on academic achievement as measured by

GPA. Flowers and Pascarella (2003) used this concept in their study of race effects on cognitive development in college with African American and Caucasian students. They used Pascarella's Model as the conceptual framework. The model emphasizes the inputs and interactions that shape cognitive development in college versus those items that would shape cognitive development of someone who did not attend college (Pascarella, 1985). Still others continue to better/differentially conceptualize Tinto's model.

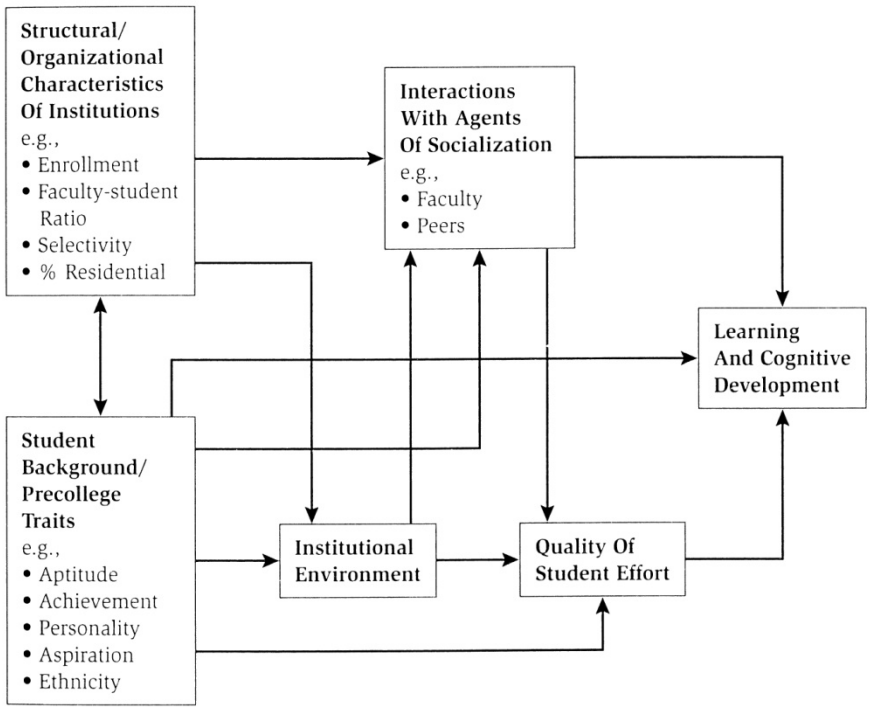

Figure 3. General Causal Model for Assessing the Effects of Differential Environments on Student Learning and Cognitive Development. From *How college affects students: A third decade of research (*p.50), by E. T. Pascarella and P. T. Terenzini, (2005) San Francisco: Jossey-Bass. Copyright 2005 with kind permission of Springer Science and Business Media.

Watson Scott Swail.

Swail, Redd, and Perna (2003), cite that the research initiated by Swail is based on the framework of Tinto's work and has five components of a student retention framework (see Figure 4).

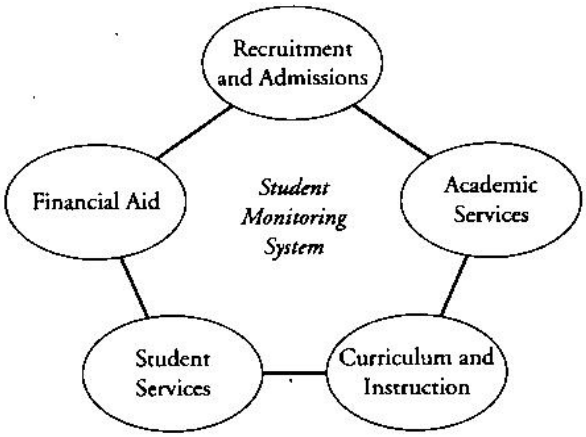

Figure 4. Five Components of the Student Retention Framework. From *Retaining minority students in higher education: A framework for success.* (p.91), by W. S. Swail, K. E. Redd, & L. W. Perna, (2003). In A. J. Kezar (Ed.) *ASHE-ERIC Higher Education Report, 30*(2) San Francisco: Jossey-Bass. Copyright 2003. Reprinted with permission of John Wiley & Sons, Inc.

The framework is designed to help administrators during planning of programs for student success (Swail, 1995). For example, students need to be shown where these services are located on campus in an intentional way. "Simply living on the campus increases the odds that a student… will return for a second year of study, but it does not guarantee that he will take advantage of academic-support services, participate in co-curricular activities, or interact with faculty members or friends on a meaningful level.

That is especially the case for first- generation students who don't know what to expect from college life" (Kuh, 2007, p. B12). The Swail framework uses practical application to account for areas on campus where students seek resources and spend some of their time outside the classroom for academic support and achievement. The areas and the interaction of these areas are designed to help with retention.

Many students need to take remedial courses at universities. According to Kuh (2007), nine out of every 10 students starting college say they intend to use an academic-assistance or learning-skills center, but by the end of the first year, only about half have done so. This occurs even though we put so much emphasis on helping first year students. Why are students not using these resources? It is important that students are satisfied with these services so that they will continue to use them. Are they located too far away from where students live? Do the students know where they are located on campus? Are the hours not conducive to student life as opposed to staff life? These are questions institutions must address to help all students locate and use these facilities on campus. Also, since this model is based on Tinto's framework, a college should explore the social interactions between students and the staff to see if there are any problems in this area. If social interactions are a problem this may hinder students from using the facility or services.

John C. Weidman.

Lastly, Weidman's model (See Figure 5) not only emphasizes interactions on campus but also takes into account the non-college influences on students and where they spend their time (Pascarella & Terenzini, 2005). The non-college

reference group sets this model apart from other conceptual frameworks. Drawing on the research of Chickering, Astin, Tinto and his own research, Weidman's conceptual framework, "shows concern for the situational and individual developmental constraints on the choices made by participants in an organizational environment", (Weidman,1989, p. 298). Although, not clearly seen in the framework, Weidman also pays attention to the spatial location of reference groups and their potential value in socialization. The Weidman model has been endorsed by Chickering and Reisser (1993). No criticism was found in the literature of the Weidman model. However, since the model is based on Chickering, Astin, and Tinto's work, a review of their criticism should be examined before using the model. The models help with the development of measures of student involvement.

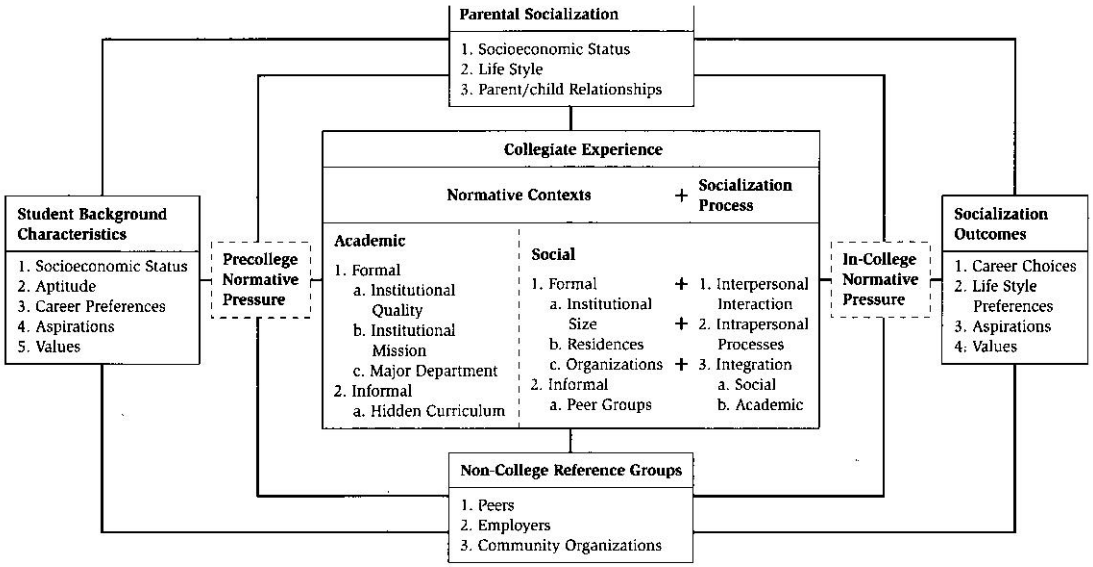

Figure 5. A Conceptual Model of Undergraduate Socialization. From *Higher Education: Handbook of Theory and Research*, Vol. 5, (pp. 289-322). By J. C. Weidman, (1989). In John C. Smart (Ed.). *Undergraduate Socialization: A Conceptual Approach*, New York:

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Instruments in the field

Using the theories and models mentioned earlier, several instruments have been developed to measure student involvement and student engagement in college. Colleges pay for access to the results and findings that these instruments uncover. They assess the college's programs and give an overview of the student body, or freshmen and senior classes. The following discussion will address the major instruments in the field: NSSE, CSEQ, CIRP, and the SDTLA.

NSSE

The National Survey of Student Engagement (NSSE) instrument is called the College Student Report when given to students (freshmen and seniors). According to the NSSE website (National Survey of Student Engagement, 2007), it was developed and supported by a grant from the Pew Charitable Trusts and coordinated and tested by Peter Ewell of The National Center for Higher Education Management System (NCHEMS), and George D. Kuh of the Center for Postsecondary Research and School of Education at Indiana University. Interestingly, the research team convened to help with the project included Astin, Chickering, Kuh, Pace, Gary Barnes, Peter Ewell, John Gardner, Richard Light and Ted Marchese. The NSSE is currently under the direction of Alexander McCormick at the Indiana University Center for Postsecondary Research (National Survey of Student Engagement, 2010).

The NSSE is a self-report instrument. The convergent and discriminate validity of NSSE scalelet (scalelet -"a set of survey questions related to a specific aspect of the educational experiences of a group of students ", (Pike, 2006, p. 551)) scores were investigated by George Pike. The purpose of his study was to evaluate measures of student engagement. Student-engagement theory served as the construct system against which the scalelets were judged (Pike, 2006). Researchers who do work in student development and student involvement use the items from the NSSE and make scalelets to study correlates. Ahlfeldt, Mehta and Sellnow (2005) confirmed that subsets of the NSSE could be used to measure engagement. As noted earlier the words engagement and involvement have both been used simultaneously.

CSEQ

Pace is also the originator of another instrument in addition to the NSSE. The College Student Experiences Questionnaire (CSEQ) has self –reported information of students' demographic characteristics, involvement experiences, and intellectual and social gains. The scales are designed to capture increasingly higher levels of student effort (Ethington & Horn, 2007). For example, a student who is an officer in an organization would be perceived as having greater involvement than someone who is just a member.

The original instrument did not take into account or focus on off campus experiences (Pace, 1984). Currently, the 4th edition is "an [176] item instrument designed to assess where students expend effort related to their college experience and what they learned as a result of their college experience", (Lundberg, Schreiner, Hovaguimian, & Miller, 2007, p. 63). Also, the 4th addition was updated to include urban universities and

activities of today's students (Kuh, 1999). According to its website, the CSEQ is more succinctly:

> The ***College Student Experiences Questionnaire*** (CSEQ) Fourth Edition is a versatile tool that assesses the quality of effort students expend in using institutional resources and opportunities provided for their learning and development.
>
> Quality of effort is a key dimension for understanding student **satisfaction**, **persistence**, and the **effects** of attending college. The more students engage in educational activities, the more they benefit in their learning and development (Indiana University Bloomington, 2005).

The 4th edition has improved over the 3rd addition by including scales on students' use of technology; however, it has left out many items about residential life (Pike, 1999). Pike sees this as a limitation given that many universities are doing more service learning in the residence halls. The CSEQ does not address dimensions appropriate for two year institutions.

CIRP

Another instrument (study) used extensively is the Cooperative Institutional Research Program (CIRP). Whereas the NSSE is a cross-sectional study CIRP is a longitudinal study (Astin, 2003). The CIRP, established in 1966 is the nation's largest and oldest empirical study of American higher education, involving data on some 1,900 institutions and over 12 million students (Higher Education Research Institute, 2007).

The CIRP was the first of its kind to help us understand the impact of college on students (Astin, 1977).The CIRP uses data from The Freshmen Survey, Your First College Year Survey, and a College Senior Survey (Sax, Bryant, & Harper, 2005).

While gathering all these data on students using surveys or instruments, the researchers find out how students are using their "energy and time" (Astin, 1985). By studying the trends of results from the past 40 years of CIRP data, institutions can plan for employment needs and anticipate where students will seek help and services. For example, increased stress and grade inflation in high school (Astin, 1998), may cause a need for more counselors on campus and more systematic preparation with study habits and test taking strategies.

Different authors specifically define student involvement by borrowing items from the previously mentioned instruments to form scales. The involvement area may include academic engagements, as an example, which will include four scales – library experiences, active and collaborative learning, writing experience, and interaction with faculty (Pike & Kuh, 2005). While these instruments measure what students are doing the SDTLA may tell why students do or do not do what they do.

SDTLA

The *Student Developmental Task and Lifestyle Assessment* (SDTLA) assesses how students develop and spend their time while on campus (See Appendix B). It has 153 items excluding demographic information. Of particular interest are the Establishing and Clarifying Purpose Task, the Developing Autonomy Task, and the Mature Interpersonal Relationships Task as part of the *SDTLA.* These dimensions relate to student development and involvement. Students who score higher on these tasks potentially have

the ability or assertiveness to seek help from peers, and use the resources the institution provides that lead to academic success (Appalachian State University, 2009). Those students who score lower on these *Tasks* may not seek the help that they need. While SDTLA assess student development, ACT purports to gauge academic performance by standardized measures.

General Education Academic Instruments

The *ACT* is more familiar for its admission to college examination but *ACT* also provides additional assessment of college students. The *ACT* surveys include the *College Outcomes Survey*, and the *Student Opinion Survey*, among others, that are used to help retain and assess students at four-year institutions.

To measure academic abilities, the Collegiate Assessment of Academic Proficiency, CAAP, also developed by *ACT*, is the survey used to evaluate the general education of the university (ACT, 2008a). According to the CAAP, the report for an institution may include math, writing, reading, science reasoning, and critical thinking skills. Universities can choose to give all areas or only select a few to be evaluated.

The Measure of Academic Performance and Proficiency (MAPP) is another survey used to measure general education. MAPP measures the same areas as the CAAP except science reasoning is excluded (Educational Testing Services, 2008). An added assessment tool of general education is the Collegiate Learning Assessment (CLA). All three (CAAP, MAPP, and CLA) are part of the new Voluntary System of Accountability (VSA), that many states are using to evaluate general education (Banta, 2008).

Within these findings a question still emerges. Do institutions know if their students are using the resources outside of the classroom to help them perform on these tests or in the classroom? Unlike the MAAP, the CAAP has a writing component. Therefore, if students are using the writing center on campus, then their writing ability may be reflected in the outcomes of the CAAP assessment.

Using the CAAP provides institutions some information regarding how their undergraduate general education is performing in relation to other universities in a higher education system. The university first needs to make sure the CAAP is in line with their general education goals. Also before the CAAP is used, there should be some consistency throughout the system. For example, a college will have to decide when to administer the exam, i.e. before 40 credit hours are taken or after 60 hours. Another consideration is what to do if some students may not need certain courses for their degree plan (Hoyt, 2001) and yet those courses may be tested on the exam. Craig (1998) suggested the CAAP be used as a pre-test (at point of entry) post-test (point of exit) for students at community colleges.

The CAAP is used and correlated with the Pascarella's Casual Model to study cognitive effects of college (Flowers & Pascarella, 2003), as it is also correlated with ACT scores to predict CAAP scores and college GPA (Bryant, 1997). According to Hoyt (2001), the CAAP results are better if the students are motivated to take it. To help discover models on general education measures previous studies were examined.

Results of previous studies

The methods used in previous studies were reviewed to help identify and list student involvement indicators and the results of these reviews can be found in Appendix

A. The list has a range of indicators of student involvement from participation in athletics to student organizations, to travel (study) abroad. Likewise, these student involvement indicators were correlated and ranged from *a – z* such as from artistic interest to vocational preparation. Using these findings of involvement indicators, an instrument was developed for the current study to see where students are involved and later to analyze their patterns of involvement. The development of this instrument is reported in Chapter III. Appendix A also shows areas of academic involvement indicators too.

Academic involvement (engagement) outside the classroom

Academic involvement outside of the classroom is essential to student success. Many of the involvement indicators found in Appendix A have been related to academic engagement that includes faculty interaction (Astin, 1985; Fischer, 2007; Flowers, 2004; Gellin, 2003; Grauke & Woolsey, 2005; Guiffrida, 2004; Hernandez, Hogan, Hathaway & Lovelle, 1999; Kuh, 1995; Milem & Berger, 1997; Pascarella, Edison, Nora, et al. 1996; Pike & Killian, 2001; Pike, Kuh, & Gonyea, 2003; Sax, Bryant, & Harper, 2005; Svanum & Bigatti, 2005; Terenzini & Pascarella, 1978; Zhao, Kuh, & Carini, 2005), or use of campus resources (Flowers, 2004; Pike, Kuh, & Gonyea, 2003). In addition to involvement outside the classroom, academic involvement relationships to peers outside the classroom have been cited as involvement that can lead to academic achievement (Ullah & Wilson, 2007).

Academic Achievement

Where students are involved outside the classroom can facilitate or inhibit their academic achievement (Astin, 1993). Academic achievement is linked to many factors related to where students spend their time. In reference to student outcomes, there is

significant evidence that out-of-class experiences have a strong influence on student learning (Strauss & Terenzini, 2007). For example the next three references are about student behaviors outside the classroom that enhance academic achievement.

According to Ullah and Wilson (2007), the faculty-student relationship is significant to academic achievement. Likewise, female students who spend time with peers had a positive effect on academic achievement (Ullah & Wilson, 2007). Also, subcultures and subenvironments in the same institution have differential effects on academic achievement and cognitive development (Pascarella, 1985).

Student Involvement

Many times on campus, events are measured by the number of students who show up, without actually measuring the outcomes or intent of the program. Effect on academic achievement would let administrators know if the event is leads to student retention. It is one thing to know how many were there; it is another thing to know over time if the event contributed positively or negatively to a students' GPA. However, one event or activity does not determine the academic achievement outcome. Academic achievement is a combination of many events in a student's life. One aspect is where they spend their time outside the classroom. A study is needed to see the order and structure of how different types and levels of co-curricular involvement affect grade point averages (Emerick, 2005).

Most studies have examined predictors of academic achievement and retention. In 2004 for example, DeBerard, Spielmans, and Julka studied 10 predictors of cumulative GPA among college freshmen. Amongst the 10 predictors, they found that both drinking and social support were significant to predicting academic achievement. However,

contrary to most research not all involvement leads to academic achievement. Guiffrida (2004) found for African American students with too much involvement in a student organization, and by not delegating enough activities (responsibilities) to others, leads to poorer academic achievement. He also found in this populace that low academic achievers had a different outlook on involvement than their high academic achieving peers. Low achievers saw involvement as personal representation for all students were as high achievers saw involvement in the same organization as a priority but academics had a higher priority. In addition, the level or type of involvement was also different for high academic achievers vs. low academic achievers within the same group. How does that reflect on the student body as a whole? In his 2004 study only 84 African American students were analyzed. Therefore, Guiffrida (2004) suggested more research is needed to know and understand when student involvement becomes an asset or a liability, academically speaking. Similarly, Astin (1999) calls for a need to find out when involvement stops becoming beneficial for the student. Likewise, it would be helpful to know the balance between social integration and academic integration.

The social integration of Tinto's model is seen as a positive in relation to retention. However, social integration can also be a hindrance to academic achievement if the socializing is more important and takes up too much time in a student's life. Thus, more must be known about the effects of different levels of student involvement on achievement.

Friedlander (1991) suggests the quality of time a student spends on academic pursuits lead to academic achievement. To concur with Friedlander, Guiffrida (2004) found that students with high academic achievement may set limits on their involvement

outside the classroom, for example with the time they give to student organizations. Again, from this researcher's experience students are involved in out-of- class academic pursuits that help them prepare for prestigious scholarships and awards. In turn the more prestigious scholarships and awards these students receive at an institution the more a college can use this information in advertising to attract "like" students.

This current study will attempt to determine not only where students are involved, but also how satisfied they are with that involvement. It will also examine how these choices of involvement are correlated and thus form structures that can be named and used to better define the construct of student involvement outside the classroom. This is critical knowledge because so many colleges and universities are experiencing low retention rates. This study may help university administrators and staff better serve students, reduce costs, develop more effective programming and services, and help with graduation rates. It all starts first by examining were students are involved their freshmen year.

First year studies vs. the other years

The review of literature for first year students is extensive. Many of the authors focus efforts on freshmen to help them be successful their first year (Upcraft, Gardner & Associates, 1989; Upcraft, Garner & Barefoot, 2005; Barefoot et al., 2005) which leads to graduation. The emphasis is to provide freshmen the tools and skills to be successful, which includes helping them be involved in healthy ways on campus. The academic achievement in the first year has been shown to be influential for retention and degree attainment (Pascarella & Terenzini, 2005). However, the literature does not have many studies that look at freshmen through senior year patterns of involvement outside the

classroom as they relate to their academic achievement.

Few studies look at other years as closely as the freshmen year. It is not totally clear why this is the case. It may be that financial motives are focused on retention when students are most susceptible to attrition. In a review of academic retention and involvement of other college years, Granuke and Woosley (2005) explore issues with sophomores, while Huang and Chang (2004) examined the student involvement of third year students.

Specifically, they found that students should get involved in both academic and out-of-class room activities to make the most of cognitive and academic growth. They examined patterns of self confidence and interpersonal skills across nine involvement patterns. What they found is that both self confidence and interpersonal skills increase linearly as involvement increases. This is one of a few studies that do not concentrate on first or second year students. The authors chose not to look at the fourth year, citing from previous studies that fourth year students are less involved than all previous years. Huang and Chang's article was about students in Taiwan. The current study will look at out of class involvement for first year through fourth year students to see if different structures emerge from within a population of college students from a United States southwestern regional public university.

Other studies

Student involvement outside the classroom has been studied from the first year in college. However, this construct has been examined from even more multiple perspectives.

Emerick (2005) examined grade point average, campus involvement, and self

efficacy; however the population was from a commuter campus where 74% of the students did not live on campus. The current study is focused on a predominantly residential campus. In regards to academic achievement there is a deficit in knowledge about the structural relationship between out of classroom involvement and academic achievement (Ullah & Wilson, 2007).

Zheng, Saunders, Shelley, and Whalen (2002) found by using factor analysis and regression that a significant understanding of student outcomes such as academic achievement can be acquired through studying patterns of interaction. However, their study only examined variables such as pre-college characteristics, freshmen, and environmental variables over one to two semesters.

Summary of the Literature

The life of today's college student is becoming very multifaceted and complex (Kuh, 2003). Students are involved in many areas on campus as well as off campus. Campus involvement can play a key role in student success from the freshmen year to the senior year. Where students reside, how far they are from campus, and how much time they spend on campus are all important to student involvement and academic achievement. Students also should be aware of resources for success located on campus and use those resources when they are not in the classroom.

The major theories and models on student development and involvement by Chickering, Astin, Tinto, Pace, and Pascarella and Terenzini were presented. In addition, conceptual models by Swail and Weidman that look at student interactions as they relate to resources on campus and non-college interactions were discussed.

Thoughtful consideration was given to several instruments that are administered

on different campuses were students are involved, based on student development theory and the student departure model. These include, the NSSE, CSEQ, CIRP, and SDTLA.

With respect to academic achievement as it relates to student involvement outside the classroom, few studies examine what that structure looks like for high achieving students vs. low achieving students. To measure where students are academically, general education measures were presented. The CAAP by ACT was discussed in more detail.

Many studies and books are written about helping freshmen survive to be sophomores. Little research is done on sophomores, juniors and seniors. In addition, many studies are completed about the positive aspects of student involvement outside the classroom. However, very few studies combine out of classroom experiences of sophomores through seniors, or present the negative aspects of that experience on the effects of academic achievement. In addition, Call (1974), says a worthy study would research student involvement as extracurricular activities increases and if so does academic achievement suffer.

Based on these facts this current study will examine student involvement of freshmen through seniors to see their patterns of involvement outside the classroom and how that involvement relates to their academic achievement as measured by GPA. In addition, this study will look at student involvement as it relates to CAAP scores, on critical thinking, reading, and writing.

Further, this study includes a more global inclusive measure of student involvement and examines satisfaction as well as activity level. This will be achieved by searching for global factors underlying student involvement, examining and naming those

structures, and relating those factors, not just total activity level, to measures of achievement. Therefore, the following research questions were formulated to guide this investigation:

1. What is the empirical structure of college student involvement in various activities outside the classroom? and
2. How do the different structures of student involvement relate to dimensions of student academic achievement?

CHAPTER III

METHODOLOGY

This chapter describes the methodology used and the design of this study. The participants are described as well as the measures employed. Finally, the procedures used to collect the data are discussed, and the data analyses are described.

Research Participants

The participants were selected from a population of approximately 4000 freshmen through seniors at a regional Midwestern University in the United States during the spring semester. The stratified random sample by classification consisted of 360 students as noted by the Student Affairs division. A computer generated list of 120 students from each classification was selected. The list did not included concurrently enrolled (high school students) or on-line or remote students. Also included were those students who did not show up from the previous assessment period. If a student was selected to attend assessment day twice in one year, the students were told they could call Academic Affairs and be excused from the current assessment day. The next student on the list was then notified. There was no minimum number of credit hours as a criterion for selection.

The majority of the students are White. In addition, the student enrollment includes African American, Asian American, Native American, Hispanic, and International students. The student body consisted of traditional and non-traditional students.

Design

The design of this study includes several components. The three major components included in the design of the study were 1) an item analysis of the Student Involvement Inventory (SII) (D'Arcy & Dew, 2007) was performed to maximize internal consistency of each scale, 2) a principle axis factor analysis with oblimin rotation was presented to study the current SII items, 3) multiple correlation analyses were performed using the SII scales and/or factor scores to examine the relationship to academic achievement dimensions.

The first stage of analysis was to perform the item analysis of the four SII scales. Item to total correlations were used to maximize coefficient alpha. The *Student Involvement Inventory* was factor analyzed to see actual patterns of involvement outside the classroom. Principle axis factor analysis was employed. This is in response to research question one. Since the factors were assumed to be correlated oblique (oblimin) rotation was used.

In response to research question two, factor scores derived from principle axis factor analysis were used to relate the construct to critical thinking scores, reading scores, and writing scores. These last three variables were measured by the Collegiate Assessment of Academic Proficiency, CAAP.

Measures

This study involved the use of two formal instruments to measure student involvement outside the classroom and academic achievement for college students.

Student Involvement Inventory, 2007

The first form of The *Student Involvement Inventory* (SII) was initially developed as part of a psychometrics class (see Appendix C). The instrument was administered to 200 students enrolled in Orientation/College Success classes at three different universities. Psychometric properties were examined, with the instrument obtaining a Cronbach's coefficient alpha of .72 as a measurement of internal consistency reliability. Principal component analysis with oblique (oblimin) rotation was used to investigate factor structure. The research concluded that a four factor solution was the best solution. Reliability analysis was conducted on each of the identified factors. Factor reliability scores were deemed acceptable, but were not very high. For factors 1(Structured campus involvement), factor 2 (Proximity to campus), factor 3 (Campus resources), factor 4 (Social connections) the Cronbach's coefficient alpha were .78, .58, .54, and .62, respectively. Further refinement of both the existing questions and the overall instrument, including the possible inclusion of additional items, might result in an improved factor reliability score. Descriptive data yielded a normal distribution of composite scores. Mean differences related to demographic categories were noted.

Face validity and content validity were established in the development of the instrument. Factor analysis for construct validity yielded a Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy of .71 and the *p* value of the Bartlett's Test of Sphericity was < .01, both indicating the use of factor analysis as an appropriate means of assessing validity. The initial factor solution, using Oblimin rotation, resulted in a four factor solution (four factors with Eigenvalue >1), accounting for 60.52% of the variance.

A second three factor solution was run, again using Oblimin rotation. The three factor analysis yielded a KMO of .71 and the *p* value of the Bartlett's Test of Sphericity was < .01. The three factors accounted for 51.77% of the total variance. Since the three factor solution contained more cross-loaded items than the four factor solution, had lower reliability boundaries (communalities), and since the factor designation (description of factor) seemed more apparent with the four factor solution, the researchers concluded that the four factor solution was the appropriate solution. The four factors that emerged were named and interpreted as:

1. Use of Campus resources and facilities (CRF) – resources on campus such as tutoring centers, writing labs, gymnasium, library, computer labs, or facilities that students can use to help them be successful on campus
2. Proximity to campus (PROX) – convenience to campus
3. Social connections (CON) – relationships that students have and how students socialize on or off campus
4. Structured campus involvement (SCI) – out of the classroom campus involvement that is part of the university environment

Student Involvement Inventory, 2009

An expanded version of the initial instrument was developed for this study (see Appendix D) after further research on the subject. First, a comprehensive review of the literature was conducted to determine the total pool of items previously used in operationalizing "student involvement". Second, a matrix was developed to show involvement indicators and correlates in the literature (see Appendix A). From this review several more items were discovered. After the items were developed, a panel of

experts (faculty in the field) reviewed the items and provided feedback. The feedback was in the form of written narrative comments. Third, the researchers were also able to contribute items from their professional experiences with higher education in areas of academic advising and student affairs. For example, the researchers included items about how satisfied students were with tutoring labs, how often they used them, how much time students spend in the student union, and if living off campus hindered them from attending events on campus due to how far they lived away from campus.

The current inventory used a7- point Likert type response format. The 122 items including demographic information on the inventory also asked students to evaluate how satisfied they were with student support services on campus (such as career services, counseling services, and residential life) as well as academic support services. In addition, items addressed satisfaction with campus jobs and off campus jobs.

The SII was chosen over the College Student Experience Questionnaire, National Survey of Student Engagement, and Cooperative Institutional Research Program, because it is shorter and only explores out-of-classroom college experiences. With the concepts of the Swail and Weidman models included, the SII items reflect practical areas of student time and energy on and off campus.

Collegiate Assessment of Academic Proficiency, CAAP

To measure academic achievement, the Collegiate Assessment of Academic Proficiency, CAAP, is the survey used to evaluate the general education of the university (ACT, 2008a). According to the CAAP, the report for an institution may include math, writing, reading, science reasoning, and critical thinking skills. Universities can choose to

give all areas or select a few to be evaluated. This study examined critical thinking, writing (essay) and reading skills.

The internal consistency reliability for the CAAP critical thinking and reading was measured by the Kuder-Richardson Formula 20 (K-R 20). The scores were .85, and .86, respectively (ACT, 2008b). These numbers represent Form 12A of the CAAP. Our study used Form 13A for critical thinking and reading but the scores for Form 13A were currently unpublished. The writing (essay) exam using Form 88B is scored by two raters for each essay. The inter-rater reliability for both essay one and essay two was .71 (ACT, 2008b).

The validity of the CAAP is discussed in the CAAP Technical Handbook 2008-2009. According to the handbook the validity indicators were as follows:

> The content validity of the CAAP was established by a panel of expert judges and an advisory committee. The criterion-related validation for the CAAP scores include measure of the students' academic knowledge and skills, CAAP as a predictive measure, and CAAP as a measure of educational change. A longitudinal study of educational change for 26 institutions and a cross sectional study of 56 institutions both analyzed with analysis of covariance, were positive. The Spearman-Brown reliabilities for longitudinal mean differences scores were .92 (writing skills), .60 (reading), and .81 (critical thinking). However, individual students had smaller reliabilities with Spearman-Brown coefficients of .72 (writing), .40 (reading), and .34 (critical thinking) (ACT, 2008b, p.38-39).

In addition, Pascarella, Bohr, Nora, and Terenzini (1995) used CAAP scores to measure educational gains/losses for freshmen athletes. This study consisted of more than 2000 students.

Procedure

As part of the data collection process, the SII instrument was administered during a bi-annual assessment day at a regional Midwestern university in the United States along with the CAAP and the SDTLA. The students were contacted via a letter from Academic Affairs asking the students to attend assessment day before they enroll for the next semester. The students were told the day, location, and time to attend. To accommodate the students and facility location, three different times in two hours shifts were scheduled at 8:30am, 11am, and 1:30pm (see Appendix E). Later, an email was sent from the vice president of Student Affairs closer to the date to remind the students of the assessment day (see Appendix F).

On Assessment day, the students were read the required directions per the CAAP Test Administration Manual 2009-2010 (ACT, 2009). During each two-hour segment, the CAAP was administered first, followed by the SII, and later the Student Development Task Assessment (SDTLA). In the first two hour session the CAAP examined critical thinking. In session two the CAAP writing exam was given. In session three, the CAAP reading exam was given. All three sessions, received the SII and the SDTLA. The Student Involvement Inventory was a paper copy exam booklet. The responses were recorded on a scantron answer sheet. Pencils were used to record answers. Also the CAAP and SDTLA were administered in paper copy form as part of the assessment day. The CAAP examined critical thinking, reading and writing skills.

This study examined the archival data collected during assessment day from records obtained from Academic Affairs. In addition records were examined from the institutions' Information Technology department to include demographics and academic achievement records for students. The researcher could not identify individual students as sited by the Institutional Review Board procedures (see Appendix G), thus students' responses were anonymous.

Data Analysis

The effect of item deletion on Cronbach's alpha, the corrected item-total correlations, and the inter-item covariance matrix were assessed to identify items for possible deletion. A principal axis factor analysis with oblique (oblimin) rotation was used to examine the factor structure of the instrument. Reliability analyses were conducted on each of the identified factors. Multiple correlation analysis using the new scales and/or factors was conducted to examine the relationship of out of class student involvement to academic dimensions. In addition, the SII factor scores were related with each of the three CAAP scores.

CHAPTER IV

RESULTS

The purpose of this study was to examine the out of classroom experiences of college students as they relate to academic achievement. This included a search to explore the structure of the new measure of student involvement, and if there were positive or negative relationships between student involvement and academic achievement. Fundamental to this inquiry was the development of a set of scales to measure student involvement, broadly defined. Scales designed to assess both activity and satisfaction with the levels of activity were developed. The research questions to address these issues were:

1. What is the empirical structure of college student involvement in various activities outside the classroom?
2. How do the structures of student involvement relate to dimensions of student academic achievement?

The psychometric properties of the two sets of scales, activity level and satisfaction, were first examined. The results are presented in the following order: item analyses, interscale correlations, exploratory factor analysis of student involvement items, relationship of Student Involvement Inventory (SII) scale scores to factor scores, multiple

correlation analyses relating the student involvement construct to academic measures and the relationship of the SII with demographic variables.

Scale Development

Item Analyses

Initially, each of the four activity level scales and each of the four corresponding satisfaction scales were subjected to an item analysis. Items were selected for retention on each scale based on their corrected item scale correlations. The results of the analyses are presented in Table 1.

Table 1

Student Involvement Scales Activity and Satisfaction Item Reliabilities

Scale	Initial Number of Items	Terminal Number of Items	Coefficient Alpha for Activity Items	Coefficient Alpha for Satisfaction Items
Structured Campus Involvement	14	7	.81	.90
Proximity	7	4	.83	.81
Campus Resources and Facilities	16	6	.89	.93
Social Connections	11	4	.64	.74

As can be seen in Table 1, the item analyses of the 122 item inventory was reduced to 21 items (see Appendix D). The four scales produced were consistent with the original Student Involvement Inventory, 2007. The item reliabilities are represented by coefficient alpha for each scale used in Table 1. Notice, the eight subscales produced

coefficient alphas ranging from .64 to .93. Results of these items analyses were very similar for the four satisfaction scales.

Interscale Correlations

The correlations among the SII activity scales and the SII satisfaction scales are identified in Table 2 and Table 3, respectively. The correlations among the activity scales ranged from -.07 between Campus Resources and Facilities (CRF) and Proximity to .51 between Social Connections (SOC) and CRF. The SII satisfaction scales are generally more correlated with one another than are the activity scales. In addition, the correlations are all positive among the satisfaction scales. The correlations for the satisfaction scales ranged from .34 between Proximity and Structured Campus Involvement (SCI) and .54 between SCI and SOC.

Table 2

Correlations Among Student Involvement Activity Scales

Construct	1	2	3	4
1. Structured Campus Involvement (SCI)	1.00			
2. Proximity (PROX)	-.12	1.00		
3. Campus Resources and Facilities (CRF)	.40	-.07	1.00	
4. Social Connections (SOC)	.28	-.08	.51	1.00

Table 3

Correlations Among Student Involvement Satisfaction Scales

Construct	1	2	3	4
1. Structured Campus Involvement (SCI)	1.00			
2. Proximity (PROX)	.34	1.00		
3. Campus Resources and Facilities (CRF)	.41	.43	1.00	
4. Social Connections (SOC)	.54	.34	.46	1.00

The correlations among SII activity scales and SII satisfaction scales are presented in Table 4. The activity levels and satisfaction levels show a low to moderate relationship. The only pair that has a moderate correlation is SOC activity to SOC satisfaction at .50. The other correlations are lower ranging from -.05 between SCI activity and Proximity satisfaction to .36 between CRF activity and CRF satisfaction. Therefore, Table 4 shows the activity and satisfaction scales are not very correlated with each other. The general lack of relationship of activities with satisfaction in this table was unexpected and represents a potentially important finding for future research.

Table 4

Correlations Among Student Involvement Activity and Satisfaction Scales

Construct Activity	SCI (SAT)	PROX (SAT)	CRF (SAT)	SOC (SAT)
Structured Campus Involvement (SCI)	.17	-.05	-.10	.14
Proximity (PROX)	.07	-.23	.03	.01
Campus Resources and Facilities (CRF)	.06	.08	.36	.26
Social Connections (SOC)	.12	.11	.22	.50

Exploratory Factor Analysis

Initially, the square correlation matrix of the 21 items of the SII activity items was examined for suitably for an exploratory factor analysis. The matrix contained a large number of moderate correlations. Barlett's Test of Sphericity indicated that the correlation matrix differed significantly from an identity matrix, X^2 (210) = 2100.17 and p <.001. Further, the KMO Measure of Sampling Adequacy, was found to be .81, clearly in the acceptable range for proceeding with exploratory factor analysis.

A principle axis factor analysis was performed on the correlation matrix. Oblimin rotation was selected due to the expected correlation among the factors. First, the K -1 rule suggested 5 factors might be rotated for the final solution. The scree plot (see Figure 6) suggested four factors should be rotated to final solution (Cattell, 1966). Given that the instrument was designed to have four scales there was a strong theoretical preference for the four factor solution. Consequently, four factors were rotated using the oblimin method for final solution.

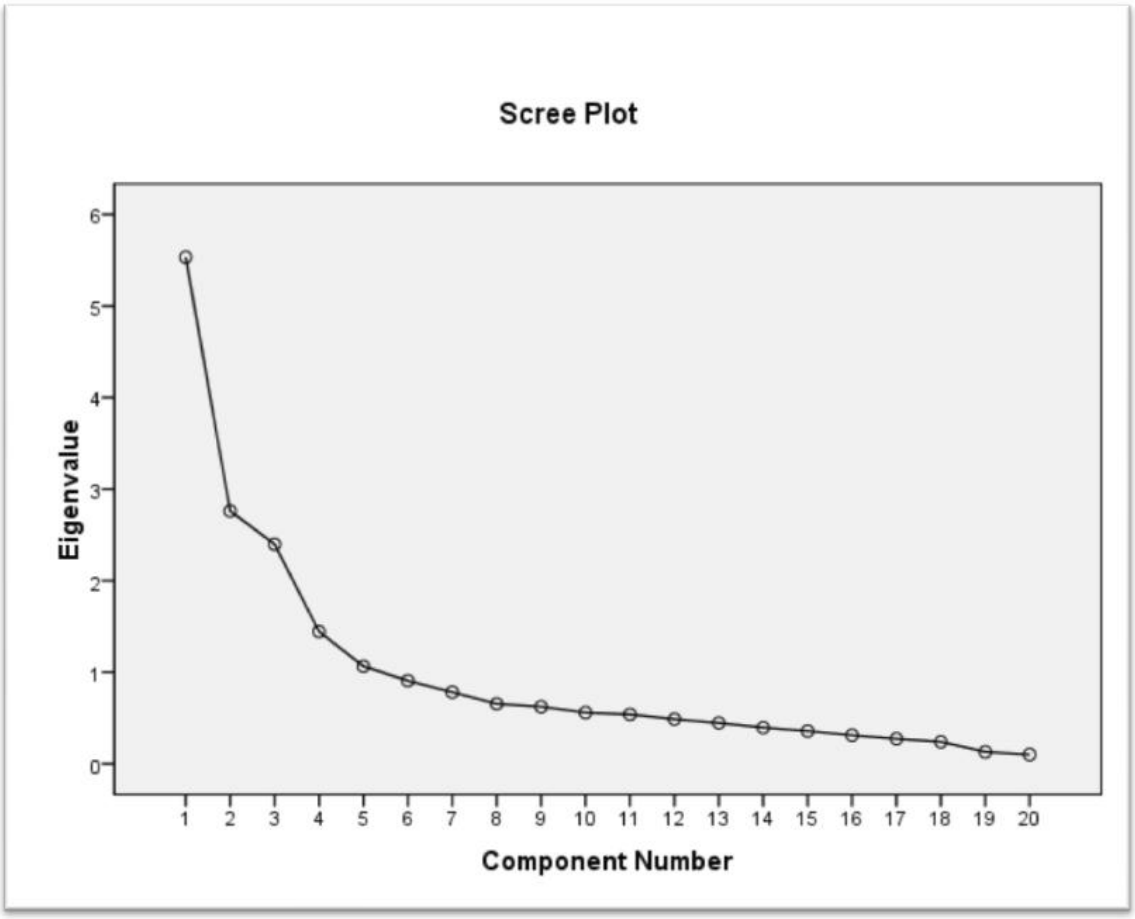

Figure 6. *Scree Plot for 21-item Student Involvement Inventory*

Table 5 is a summary of the four factor solution. Included in the table are the pattern (in parentheses) and structure coefficients, communalities, sum of squared loadings and percentages of variance. The structure coefficients reveal that the factors resemble the scale structure of items remarkably well.

Table 5

Factor Loadings for Exploratory Principal Axis Analysis with Oblimin Rotation and Communalities

Item	Factor 1 CRF	Factor 2 PROX	Factor 3 SCI	Factor 4 SOC	h^2
S II27 Fraternity/Sorority Participation	.12 (-.06)	-.16 (-.10)	**.39** **(-.36)**	.26 (-.21)	.20
S II28 Clubs/organization Participation	.20 (-.05)	-.05 (-.06)	**.71** **(-.73)**	.21 (-0.1)	.51
S II31 Service Activities Participation	.18 (-.04)	-.04 (-.06)	**.81** **(-.86)**	.00 (-.15)	.68
S II32 Other Organization Participation	.31 (-.08)	-.11 (.00)	**.76** **(-.74)**	.16 (-.00)	.59
S II83 Semesters of Organization Involvement	.29 (-.01)	-.16 (-.04)	**.75** **(-.71)**	.31 (-.17)	.60
S II84 Number of Leadership Positions	.28 (-.06)	.00 (-.10)	**.76** **(-.76)**	.13 (-.03)	.59
S II101 Hours Working in Campus Job	.25 (-.16)	-.18 (-.12)	**.46** **(-.43)**	.00 (-.14)	.26
S II99 Living Distance From Campus	-.26 (-.24)	**.63** **(.62)**	-.12 (.03)	-.08 (.05)	.45
S II107 Commute From Residence to Class	-.15 (-.09)	**.67** **(.89)**	-.19 (.07)	-.07 (-.04)	.47
S II108 Commute From Residents to Academic Services	.11 (.17)	**.87** **(.85)**	-.01 (.02)	-.05 (-.04)	.79

Table 5 (Continued)

Item	Factor 1 CRF	Factor 2 PROX	Factor 3 SCI	Factor 4 SOC	h^2
S II109 Commute From Residents to Student Services	.11 (.17)	**.84** **(.85)**	-.05 (.02)	-.05 -(.04)	.73
S II67 Faculty Office Visit	**.69** **(.63)**	-.05 (.06)	.26 (.04)	.37 (.17)	.51
S II68 Faculty Not Scheduled Visits	**.69** **(.63)**	-.15 -(.09)	-.24 (.00)	**.39** **(.19)**	.52
S II69 Faculty Discussions	**.79** **(.78)**	-.08 -(.02)	.30 (.06)	.20 -(.05)	.62
S II70 Staff Discussions	**.79** **(.80)**	.00 (.06)	.28 (.06)	.16 -(.09)	.63
S II71 Staff Career Plans Discussion	**.82** **(.82)**	-.09 -(.03)	.25 -(.01)	.25 (.00)	.77
S II72 Faculty Career Plans Discussion	**.81** **(.79)**	-.07 (.00)	.30 (.05)	.26 (.01)	.66
S II45 Socializing Outside of the Classroom	.08 -(.04)	-.07 -(.04)	.10 (.04)	**.34** **(.34)**	.12
S II85 Student Recognition by Faculty	**.54** **(.40)**	-.11 -(.04)	.20 -(.02)	**.57** **(.45)**	.47
S II86 Student Recognition by Peers	**.43** **(.31)**	.01 (.05)	.12 (.03)	**.57** (.49)	.41
S II88 Cultural Interaction	.24 (.07)	-.01 (.05)	.15 (.03)	**.58** **(.55)**	.34
Sum of Squared Loadings	5.41	2.43	2.19	0.81	
Percent of Variance	25.77	11.58	10.43	3.85	

Table 6 is a presentation of the intercorrelations of the four factors following the oblimin rotation. Two of the correlations are above .30, providing some support for the use of oblique rotation.

The correlation matrix for the SII satisfaction items was also subjected to an identical factor analysis. The results of this analysis closely paralleled the analysis for the SII activity items. See Appendix H for the summary of this factor analysis.

Table 6

Factor Correlation Matrix

Factor	1	2	3	4
1. Campus Resources and Facilities (CRF)	1.00			
2. Proximity (PROX)	-.07	1.00		
3. Structured Campus Involvement (SCI)	.31	-.14	1.00	
4. Social Connections (SOC)	.31	-.09	.19	1.00

Student Involvement Inventory Scale Scores to Factor Scores

Given the strong similarity of the factors to the SII scales, factor scores for each of the four factors were calculated using the regression method. Then, the SII scales were correlated with the four factors. Tables 7 and 8 summarize these correlations. As can be seen in the tables, the factors correlations with their respective scale scores had a range of values from .94 to .99. This is evidence of the extent to which the exploratory factor analysis was able to reproduce the intended scale structure. As a result of the

extremely high correlations to the scale scores, the decision was made to use scale scores rather than factor scores in subsequent analyses.

Table 7

Correlations Between Student Involvement Activity Scales and Factor Scores

	FACTOR SCORES			
Construct	Factor 1 CRF	Factor 2 PROX	Factor 3 SCI	Factor 4 SOC
Structured Campus Involvement (SCI)	.35	-.15	**.98**	.28
Proximity (PROX)	-.07	**.98**	-.12	-.10
Campus Resources and Facilities (CRF)	**.99**	-.09	.36	.42
Social Connections (SOC)	.51	-.07	.23	**.94**

Table 8

Correlations Between Student Involvement Satisfaction Scales and Factor Scores

	FACTOR SCORES			
Construct	Factor 1 CRF	Factor 2 PROX	Factor 3 SCI	Factor 4 SOC
Structured Campus Involvement (SCI)	.35	-.15	**.98**	.26
Proximity (PROX)	-.07	**.98**	-.12	-.10
Campus Resources and Facilities (CRF)	**-.99**	-.09	.36	.42
Social Connections (SOC)	.51	-.07	.23	**.94**

Multiple Correlations Analyzes with Each Academic Measure

Multiple correlations were completed for a linear combination of out of class student involvement to each of the six academic achievement measures. The cumulative GPA was the only academic measure that had a statistically significant, multiple correlation, [F=2.59, p<.04] (see Table 9) with a linear combination of the SII activity scales. However, the SII satisfaction scales were found to have statistically significant relationships with four academic measures: cumulative GPA, [F=2.53, p<.04], CAAP Critical Thinking, [F=4.75, p<.00], CAAP Essay 2, [F= 2.63, p<.04], and CAAP Essaycon, [F=2.52, p<.05] (see Table 10). CAAP Reading had too few cases to include in the analysis.

Table 9

Multiple Correlation Analysis with Each Academic Measure from the SII Activity Subscales

Variable	*R*	*Degrees of Freedom*	*F*	*p*
Cumulative GPA (sis uncompgpa)	.23	4, 193	2.59	**.04**
Semester GPA (sis unlstgpa)	.17	4, 193	1.38	.24
CAAP Critical Thinking	.27	4, 61	1.22	.31
CAAP Essay 1	.21	4, 61	0.72	.58
CAAP Essay 2	.25	4, 61	1.01	.41
CAAP Essaycon	.25	4, 61	1.00	.42

Table 10

Multiple Correlation Analysis of Each Academic Measure from the SII Satisfaction Subscale

Variable	*R*	*Degrees of Freedom*	*F*	*p*
Cumulative GPA (sis uncomgpa)	.23	4, 175	2.53	**.04**
Semester GPA (sis unlstgpa)	.20	4, 175	1.84	.12
CAAP Critical Thinking	.50	4,58	4.75	**.00**
CAAP Essay 1	.32	4, 58	1.66	1.17
CAAP Essay 2	.39	4, 58	2.63	**.04**
CAAP Essaycon	.39	4, 58	2.52	**.05**

Relationship of the SII with Demographic Variables

Several demographic variables were explained in relationship to the SII scales including race, class, gender, and residence. Multivariate analysis of variance was used to determine which SII total scores were significantly different across the categorical demographic variables. Class level (Freshmen, Junior, Senior) was the only demographic variable that was found to be statistically significant, [F (8, 312) = 2.07, p<.05]. This difference was found for satisfaction scales but not for the activity scales. Table 11 is a presentation of the univariate F ratios for class and also includes the structure coefficients. The three scores contributing were: Total Scores Structured Campus Involvement Satisfaction (TOTSCISAT), [F (2, 159) =4.30, p<.01], Total Scores Campus Resources and Facilities Satisfaction (TOTCRFSAT), [F (2, 159) =5.58, p<.02], and Total Scores Social Connections Satisfaction (TOTSOCSAT), [F (2,159) =4.08, p<.03].

Table 11

Multivariate Group Differences by Class

Variable	*F*	*p*	*Structure Coefficients*
Total Scores Structured Campus Involvement (SAT)	4.30	.01	-.71
Total Scores Campus Resources and Facilities (SAT)	5.58	.02	-.81
Total Scores Proximity (SAT)	.14	.87	-.09
Total Scores Social Connections (SAT)	4.08	.03	-.69

Tables 12, 13 and 14 are a summary of the multiple comparisons of the means and standard deviations for TOTSCISAT, TOTCRFSAT, and TOTSOCSAT, for the Freshman (1), Junior (2) and Senior (3) classes for each variable. The sophomore class and graduate level contained too few cases to include in the analyses. The means increased with each level of class. Multiple comparisons showed a significant difference between the Freshman and Junior Class with TOTSCISAT ($p<.05$) and TOTCRFSAT ($p<.00$). In addition there was a significant difference between Freshmen and Seniors with TOTCRFSAT ($p<.00$) and TOTSOCSAT ($p<.05$).

Table 12

Means and Standard Deviations for TOTSCISAT

Class	Mean	Standard Deviation
Freshman	19.85	9.08
Junior	23.91	7.61
Senior	24.46	9.87

Table 13

Means and Standard Deviations for TOTCRFSAT

Class	Mean	Standard Deviation
Freshman	21.08	7.82
Junior	25.18	7.09
Senior	25.25	7.27

Table 14

Means and Standard Deviations for TOTSOCSAT

Class	Mean	Standard Deviation
Freshman	15.04	4.52
Junior	17.04	4.44
Senior	17.39	4.76

Summary

Item analyses were conducted for each of the student involvement scales for both the activity and satisfaction items. The coefficient alphas ranged from .64-.93. An exploratory factor analysis was performed and produced a four factor solution for both the activity and satisfaction items that was very similar to the conceptual model. The rotated factors were found to be modestly correlated. Factor scores were generated and calculated with the designed scale scores, and these correlations among factor and scales were found to be very high ranging from .94-.99. Multiple correlation analyses were performed relating the scales scores from the SII to several measures of academic achievement. It was found that SII satisfaction scales were related significantly to several of the academic measures. However, the SII activity scales were related only to cumulative GPA and then, only marginally.

Of the demographic variables class was the only variable for which significant differences were found on the satisfaction scales, Total Scores Structured Campus Involvement, Total Scores Campus Resources and Facilities, and Total Scores Social Connections. Multiple comparisons revealed significant differences between the Freshman and Junior class on Total Scores Structured Campus Involvement and Total Scores Campus Resources and Facilities scales. There was also a significant difference between Freshmen and Seniors with the Total Scores Campus Resources and Facilities scale and Total Scores Social Connections scale.

Chapter V

DISCUSSION

The purpose of the study was to explore the structure of college student involvement outside the classroom, and examine the relationship of that structure to their academic achievement. The college student involvement structure was explored regarding activity levels outside the classroom as well as their satisfaction with this involvement. To date, student involvement has been broadly defined (Astin, 1999), therefore, for purposes of this study, item analysis and factor analysis were assessed to provide a more definitive description of student involvement. Multiple correlations were explored to see if the activity and satisfaction subscales were significantly related to academic achievement. Student demographic variables were examined to see where student involvement differed statistically. These data were used to address the research questions:

1. What is the empirical structure of college student involvement in various activities outside the classroom?
2. How do the different structures of student involvement relate to dimensions of student academic achievement?

Finally, conclusions and recommendation for future research are presented.

Research Questions

Research Question 1

What is the empirical structure of college student involvement in various activities outside the classroom?

Psychometric Analysis. Psychometric analysis was used to answer research question number 1. The current study used a 122 item instrument with 48 items specifically related to out of classroom student involvement activities. From the 48 items four activity subscales were developed and subjected to item analyses. The results of the item analysis for each subscale revealed the following coefficient alphas: Structured Campus Involvement (α=.81), Proximity (α=.83), Campus Resources and Facilities (α=.89) and Social Connections (α=.64). In addition students were asked to rate their level of satisfaction with each of the items expressed within activity subscale. The results of the item analysis for the student satisfaction with the activities within in each subscale revealed the following alpha coefficients that are somewhat larger than activity subscales: Structured Campus Involvement (α=.90), Proximity (α=.81), Campus Resources and Facilities (α=.93) and Social Connections (α=.74). A comparison of these coefficients suggest the intercorrelations are stronger among these items and are more reliable measures of this construct than those measuring activity. The Social Connections subscales had the lowest coefficient alphas and tied Proximity to Campus for the least number of items (four) with the activity scales as well as the satisfaction scales.

Item reliabilities reduced the 48 items to 21. The 21 items were subjected to principle axis factor analysis with oblimin rotation and a four factor solution was found. This solution was consistent with the findings in the D'Arcy & Dew (2007) pilot study.

Student involvement came to be defined as Structured Campus Involvement, Campus Resources and Facilities, Proximity to Campus and Social Connections. The meaning of each description was presented in Chapter 1

Conceptual Analysis. The 21 items loaded on each factor as follows: Six items loaded on Structured Campus Involvement above .39 (see Table 5). These items are consistent with Pascarella & Terenzini (2005), as areas on campus where students are traditionally involved outside the classroom such as joining campus organizations, leadership positions, and working on campus (see results in Chapter 4). Moreover, all these items are areas academic advisors and staff members are in a position to suggest ways students get involved on campus, and which can lead to greater retention of students (Tinto, 1993). Areas beyond structured campus involvement were further explored to include issues related to campus resources and facilities.

Campus Resources and Facilities which addressed matters related to using campus resources such as visiting faculty and staff during office hours had eight items with loadings above .40 (see Table 5). The importance of faculty and staff interaction with the students was consistent with what is found in the literature (Tinto, 1993; Thompson, 2001, Pascarella & Terenzini, 2005). Specifically when asked two of these items also loaded on the Social Connections factor:

> 85. On average, how many times each week do you encounter a member of the faculty, staff or administration who greets you by name?
>
> 86. On average, how many times each week do you encounter a peer, who is not a close friend, who greets you by name

This cross loading may reflect that students who are recognized by faculty and peers on campus have a sense of a social bond with faculty and peers. The Social Connections factor also included item 88,

> 88. On average, how many times each week do you interact with a peer from a different racial or ethnic group?

In addition to Campus Resources and Facilities, the Social Connections factor was concerned with how the students connect socially with the campus environment. According to Tinto (1993) social integration to the university is important for student persistence. The Social Connections factor along with the Proximity to Campus factor included the fewest number of items.

Proximity to campus, which focused on distance from campus, had four items loading above .40 (see Table 5). These items are concerned with where the student lives and if that proximity to campus hinders or helps the student as part of the student involvement experience. This is important because universities see attending events, and attending tutoring sessions, etc. as vital to student retention. Decisions on whether to have buses or bicycles on campus hinge on the discussions students are having about proximity to campus and parking issues

In summary, collectively Proximity to Campus, Campus Resources and Facilities, Social Connections, and Structured Campus Involvement give a more defined definition of student involvement outside the classroom. The four factor solution gives an empirical structure to the definition of student involvement which is generally and very broadly defined by Astin (1999). Research Question 2 will address how this structure relates to academic achievement.

Research Question 2

How do the different structures of student involvement relate to dimensions of student academic achievement?

Within the context of this study, what was reported in the Pascarella and Terenzini (2005) study, the number of activities and the amount of time spent in each has a significant relationship on students' cumulative grade point average. However, there are other points to consider beyond time on task. One such idea is their satisfaction with the degree of their involvement in these activities.

An examination of the correlation matrix (Table 4) revealed that dimensions of satisfaction with the activity level are not highly intercorrelated. Only Social Connections activity levels had a moderate correlation with satisfaction with that activity level, r=.50. Therefore, students may be active on campus but may not be satisfied with their involvement. However, in this study it was found that level of satisfaction with involvement had a relationship with more areas of academic achievement, including the Collegiate Assessment of Academic Proficiency's (CAAP) - Critical thinking, Essay 2 and Essay combined than the activity scales.

Areas of satisfaction stem from campus involvement including services provided to the student such as those Swail theorizes in Swail's Five Components of the Retention Framework (Swail, W. S., Redd, K. E. & Perna, L. W. (2003). Using multiple comparisons, a statistically significant difference was found regarding satisfaction with the use of Campus Resources and Facilities between freshmen and juniors, and between freshmen and seniors. According to Swail, and this study supports, academic and other

support service areas on campus (see Figure 4) are instrumental in the student's academic success. Item results indicated that differences were found with all items except item 74,

74. Encountered a faculty member outside of class/office hours

Therefore, there is no significant difference in satisfaction between freshmen and juniors or freshmen and seniors if a student just happens to see a faculty member while walking across campus. According to this study a more meaningful or purposeful visit does make a difference, relative to student satisfaction. This example is a part of academic integration which is part of Weidman's and Tinto's framework.

In keeping with Weidman's Undergraduate Socialization Model (Weidman, J. C., 1989) and Tinto's (1993) model this investigation found academic and social college experiences are essential to student success. This is of particular significance as it relates to first-generation college students who do not have the family background to draw upon. That is, they have to manage the college experience by relying on the resources on campus available to them. For example, campus resources may be facilities such as the career recourse center and visiting faculty during their office hours.

Along with Campus Resources and Facilities, Structured Campus Involvement also had significant difference between freshmen and juniors satisfaction. All the satisfaction Structured Campus Involvement items were significantly different except item 103.

103. Working in an on-campus job?

Working on campus is generally viewed as positive student involvement. For example, the researcher has observed often times students are allowed to do their homework at work if duties are slow or the traffic in the library is minimal.

Multiple comparisons also revealed a significant difference between freshmen and seniors with Campus Resources and Facilities and Social Connections. Two items did not account for the difference including items

65. Socializing with friends/peers outside of classes or structured organizations/activities

97. On average, how many times each week do you interact with a peer from a different racial or ethnic group.

In summary, while there are no statistically significant differences among males, females, and/or race, in this study but academic classification was found to be significant. According to this study there is a difference in the satisfaction student involvement experiences of freshmen and juniors and freshmen and seniors. The freshmen year is so important there is a Policy Center on the First year Experience (Barefoot, B.O., Gardner, J. N., Cutright, M., Morris, L.V., Schroeder, C. C., Schwartz, S. W. et. al, (2005).

While institutions are happy to see freshmen arrive on campus, this is the academic class that suffers the lowest retention rates (Upcraft, Gardner, Barefoot & Associates, 2005). The students may leave because they are not satisfied with their campus experience which may include office visits they had while on campus for a routine question or help in the math lab for calculus. This may also support Kuh's (2007) study that found nine out of every ten students did not visit the learning centers, tutoring labs, or the financial aid office. With students spending so much time on Facebook, (Heiberger & Harper, 2008) perhaps they heard from their friends that the people there are not very friendly or very helpful. Interaction with peers is very powerful influence on growth and development during the undergraduate years (Astin, 1993). Lastly, they may not be aware that these resources exist.

Not excluding seniors but more so with freshmen, this study found the faculty/student and staff/student relationships are important. In addition, this study supports Ullah and Wilson (2007) study of the faculty student relationship and its impact on student academic achievement. Along similar lines of support, this study agrees with Debarard, Spielmans, and Julka's (2004) ten predictors for cumulative GPA among college freshmen. Likewise, Gruiffda (2004) found that students, who know how to limit some campus involvement, perform better. This study found that students may be active on campus but they may not be satisfied with that involvement. If they are not satisfied they may suffer academically which may lead to leaving the university.

While the previous findings in this study were anticipated by the researcher, the researcher did not expect to find that there was not a significant difference with Total Scores on Proximity to Campus between freshmen, juniors and seniors. With many schools having a policy that requires first year students to live on campus, the researcher suspected Proximity to Campus would make more of a difference since juniors and seniors typically choose not to live on campus.

Conclusions

The focus of this study was on the empirical structure of student involvement and the relationship of that structure to academic achievement measures. Major findings suggest student involvement is related to academic achievement and more so when related to satisfaction. The academic classification of students found a difference in the satisfaction students have with their student involvement. Implications from these findings suggest examination of the campus from an ecological perspective to improve campus retention.

The findings of this study are consistent with the literature (Tinto, 1993, Pascarella and Terenzini, 2005). While it may be important for students to be active (involved) on campus to be successful academically, it is more important that students are satisfied with those activities. This study also supports the importance of exploring the ecological perspective of the student and his or her environment (Banning & Kaiser, 1974).

This study found that freshmen experiences outside the classroom are significantly different from junior and senior experiences concerning satisfaction with structured campus involvement, use of campus resources and facilities, and lastly social connections on campus. When a student visits a support area on campus it is important that the university gives the best service and care to that student. The university should not assume this is happening but it should make a concerted effort to ensure that it is. While the Study Group on the Conditions of Excellence in American Higher Education (1984) contends that with student involvement the students should engage in their own education, the institution does not want to stifle that growth and engagement by not fostering relationships that students want to continue, especially for freshmen since they are more likely to leave (Tinto, 1998).

This study found that it is important for students to be satisfied with their visits to offices on campus so they will continue to use these services. The researcher observed a display on the receptionist counter with a jar inscribed “ashes of the student who had a problem” in the financial aid counselors’ office and in the graduate college. While funny to other staff members, it may not seem funny to students in need of help. This type of

display sends a message to students not to come back. This is not the type of interaction an institution wants to occur.

Also seen on a campus, the cartoon of several characters laughing hysterically with a caption of "You want it when?!" is something students in distress should not have to see in any office or facility. These objects may be seen as a teachable moment, but the manner in which they are displayed, in full view of the students, is not the appropriate medium. Positive programming in residence halls or freshmen orientation classes would better serve this population. Collectively, these types of office jokes probably do not add to the positive campus environment institutions believe they are offering their students. Whereas juniors may have overcome these "jokes" and similar institutional barriers, many freshmen may not overcome this situation and instances and interaction like these may contribute, in the end, to a decision to leave campus. Students should not have to see signs or posters discouraging them when they are trying to seek help or are trying to correct a recent problem they have encountered on campus, whether that problem is social or academic.

If a recruiting team can be very successful and bring in the highest number of the freshmen class ever, then, it is equally as important for faculty and staff who interact with those freshmen on campus to help the students have a satisfying experience while here in order for these students to persist to graduation. If it is true that today's freshmen (and their parents) are still deciding which college to attend as they enroll during summer orientation sessions, the university must put their best foot forward to be the university the students actually attends the first day of classes in the Fall and beyond.

This satisfaction with the college experience must continue through to the senior year. Meaning, faculty and staff should continue to help students complete their college journey. Tinto (1993) says "the key to successful student retention lies with the institution, in its faculty and staff, not in any one formula", p. 4. In an institution's quest to retain as many students as possible, seniors who are satisfied with their experience may graduate and are more likely to be satisfied alumni and professionals.

Limitations

The results of this study may be affected by the following limitations. Only one, public, regional Midwestern four-year institution was part of this study. Different size institutions and different regions of the country along with community colleges would add to the generalizability of this study. The sample size was also a limitation. Due to the small representation of the sophomore and graduate class these academic classes were not analyzed. As such, evidence of the relationships of these classes is not included in this study.

Recommendations

The subsequent recommendations are presented to aid administrators as they make decisions to help students be successful on campus as well as help institutions focus on giving students the best help available. In addition, these recommendations may stress more the importance of assisting freshmen navigate the system of higher education. According to this study, their freshmen experiences are different and are relevant to continued success in college. Specific recommendations are:

1. More programming to help students realize the importance of deadlines. With better time management students may improve their satisfaction with their college journey. Many levels of satisfaction may improve for freshmen if they learn earlier that drop/add dates, assignment due dates (reading the syllabus), and reading your official campus email from the university is important and will assist in making their life stress-free on campus.
2. Peer Mentors – Pair freshmen with juniors or freshmen with seniors. Both pairs may help freshmen not only survive the year academically but also enjoy the experience. In addition, the upperclassmen can show or teach the freshmen how to get involved on camps and where the campus resources and facilities are located. (Sanchez, Bauer, & Paronto, 2006).
3. Treat receptionists and front line staff members who work closely with freshmen better so that they get adequate or frequent breaks to be fresh to answer the same questions over and over again. This suggestion is free but may reap great rewards with retention of students.
4. Have a "frequently asked questions" webpage or bulletin board posted so that staff can have some relief from routine questions.
5. Review the ecosystem design process for your university (Banning & Kaiser, 1974) with the intent of reviewing transactions that students have with their environments on campus.
6. Likewise, this study supports further research examining where students go for relaxation and socialization on campus such as the library (Waxman, Clemons, Banning & McKelfresh, 2007).

7. Evaluate staff procedures more frequently and improve operations in key service areas on campus. Suggest reading books such as *Outstanding!,* (Miller, 2010) or *Good to Great,* (Collins, 2001).

Recommendations for Future Research

Given the scope of this research, a number of recommendations for future research are presented. More psychometric work on the student involvement inventory is needed. Especially, more work to improve the Social Connections subscale. Also, cross validation of the results. It would be interesting to see use of this current structure of student involvement and relate this structure to areas of student development. In addition, more investigation into satisfaction is needed.

This study found a subjective four factor solution. It would be interesting to see if the solution holds true for large public institutions, community colleges, private institutions, Historically Black Colleges and Universities, Tribal Colleges and Universities or Hispanic-Serving Institutions. Also, in an era where more non-traditional students and veterans are returning to campus it would interesting to see if this solution will hold for this population. Lastly, confirmatory factor analysis should be performed to see if the solutions are a good fit to validate the findings.

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APPENDICES

Appendix A

Indicators of Student Involvement

Involvement Indicators

Source	NESSE or Portion of NESSE	Student Characteristics	Honors	Place of Residence	Student Organizations	Faculty Interaction
Pike (2006)	x					
Pike & Killian (2001)						
Pike, Kuh, Gonyea (2003						
Guiffrida (2004)						
Ahlfeldt & others (2005)	x					
Anaya (1996)		x	x			
Astin (1984)				x	x	x
Astin (1996)						
Baxter-Magolda (1992)					x	x
Benigni…(2002)						
Benjamin& Hollings (1995)						
Bohnert…(2007)						x
Cooper, Haley,Simpson(1994)						x
Cress, Astin, Zimmerman-Osster Bukhardt (2001)						
Fischer (2007)						x
Flowers (2004)						x
Gellin (2003)					x	x

Involvement Indicators continued

Source	NESSE or Portion of NESSE	Student Characteristics	Honors	Place of Residence	Student Organizations	Faculty Interaction
Kuh & G(1995)						
Kuh & Gonyea (2006)	x					
Kuh (1995) Lundberg, Schreiner, Hovaguimian, Miller (2007) Moore... (1998) review of all research Ouimet…(2004) design of instruments						
P & T (1979) Pascarella (2006) broad overview				x	x	x
Pike & Kuh (2005)				x		x
Schroeder & Hurst (1996)				x		
Svanum & Bigatti (2005)						

Involvement Indicators

Source	Participation in Athletics	Peer Relations	Internship &/or Employment	International Experiences	Choice of Grade Contract	Library
Pike (2006)						
Pike & Killian (2001)						
Pike, Kuh, Gonyea (2003						
Guiffrida (2004)						
Ahlfeldt & others (2005)	x	x				
Anaya (1996)	x					
Astin (1984)	x					
Astin (1996)						
Baxter-Magolda (1992)		x	x			
Benigni…(2002)				x		
Benjamin& Hollings (1995)						
Bohnert…(2007)						x
Cooper, Haley,Simpson(1994)						x
Cress, Astin, Zimmerman-Osster Bukhardt (2001)						x
Fischer (2007)						

Involvement Indicators continued

Source	Participation in Athletics	Peer Relations	Internship &/or Employment	International Experiences	Choice of Grade Contract	Library
Flowers (2004)						x
Gellin (2003)		x	x		x	x
Kuh & G(1995)						
Kuh & Gonyea (2006)						
Kuh (1995)		x	x			
Lundberg, Schreiner, Hovaguimian, Miller (2007)						
Moore... (1998) review of all research						
Ouimet…(2004) design of instruments						
P & T (1979)		x				
Pascarella (2006) broad overview						
Pike & Kuh (2005)		x				
Schroeder & Hurst (1996)				x		
Svanum & Bigatti (2005)			x			

Involvement Indicators continued

Source	Greek Life	Social Interactions	Leadership in organizations	Travel Study Abroad	Leadership Education Training	Recreational Facilities
Pike (2006)						
Pike & Killian (2001)						x
Pike, Kuh, Gonyea (2003		x				
Guiffrida (2004)						
Ahlfeldt & others (2005)						
Anaya (1996)			x			
Astin (1984)						
Astin (1996)						
Baxter-Magolda (1992)						
Benigni…(2002)						
Benjamin& Hollings (1995)						
Bohnert…(2007)						
Cooper, Haley,Simpson(1994)						
Cress, Astin, Zimmerman-Osster Bukhardt (2001)					x	
Fischer (2007)						
Flowers (2004)						x

Involvement Indicators continued

Source	Greek Life	Social Interactions	Leadership in organizations	Travel Study Abroad	Leadership Education Training	Recreational Facilities
Gellin (2003)	x					
Kuh & G(1995)						
Kuh & Gonyea (2006)						
Kuh (1995)			x	x		
Lundberg, Schreiner, Hovaguimian, Miller (2007)						
Moore... (1998) review of all research						
Ouimet…(2004) design of instruments						
P & T (1979)						
Pascarella (2006) broad overview						
Pike & Kuh (2005)						
Schroeder & Hurst (1996)						
Svanum & Bigatti (2005)						

Involvement Indicators continued

Source	Use of Student Union	Other College Experiences	Spiritual Activity	Institutional Ethos	Race & Ethnicity	First Generation
Pike (2006)						
Pike & Killian (2001)						
Pike, Kuh, Gonyea (2003						
Guiffrida (2004)						
Ahlfeldt & others (2005)						
Anaya (1996)			x			
Astin (1984)						
Astin (1996)						
Baxter-Magolda (1992)						
Benigni…(2002)						
Benjamin& Hollings (1995)						
Bohnert…(2007)						
Cooper, Haley,Simpson(1994)						
Cress, Astin, Zimmerman-Osster Bukhardt (2001)						
Fischer (2007)						
Flowers (2004)	x					

Involvement Indicators continued

Source	Use of Student Union	Other College Experiences	Spiritual Activity	Institutional Ethos	Race & Ethnicity	First Generation
Gellin (2003)						
Kuh & G(1995)						
Kuh & Gonyea (2006)						
Kuh (1995)		x		x		
Lundberg, Schreiner, Hovaguimian, Miller (2007)					x	x
Moore... (1998) review of all research						
Ouimet…(2004) design of instruments						
P & T (1979)						
Pascarella (2006) broad overview						
Pike & Kuh (2005)						
Schroeder & Hurst (1996)						
Svanum & Bigatti (2005)						

Involvement Indicators continued

Source	Minority Student Organizations	Institutional Mission	Academics
Pike (2006)			
Pike & Killian (2001)		x	x
Pike, Kuh, Gonyea (2003			
Guiffrida (2004)	x		
Ahlfeldt & others (2005)			
Anaya (1996)			
Astin (1984)			
Astin (1996)			
Baxter-Magolda (1992)			
Benigni…(2002)			
Benjamin& Hollings (1995)			
Bohnert…(2007)			
Cooper, Haley,Simpson(1994)			
Cress, Astin, Zimmerman-Osster Bukhardt (2001)			
Fischer (2007)			
Flowers (2004)			

Involvement Indicators continued

Source	Minority Student Organizations	Institutional Mission	Academics
Gellin (2003)			
Kuh & G(1995)			
Kuh & Gonyea (2006)			
Kuh (1995)			x
Lundberg, Schreiner, Hovaguimian, Miller (2007) Moore... (1998) review of all research			
Ouimet…(2004) design of instruments			
P & T (1979)			x
Pascarella (2006) broad overview			
Pike & Kuh (2005)			x
Schroeder & Hurst (1996)			x
Svanum & Bigatti (2005)			

Involvement Correlates

Source	Public Relations Classes	Friendship Quality, Loneliness, & Social Adaptation	Critical Thinking	Student Learning	Personal Development/ personal skills	College Attrition
Pike (2006)						
Pike & Killian (2001)				x		
Pike, Kuh, Gonyea (2003				x		
Guiffrida (2004)						
Ahlfeldt & others (2005)					x	
Anaya (1996)						
Astin (1984)						
Astin (1996)						
Baxter-Magolda (1992)					x	
Benigni…(2002)	x					
Benjamin& Hollings (1995)						
Bohnert…(2007)		x				
Cooper, Haley,Simpson(1994)					x	
Cress, Astin, Zimmerman-Osster Bukhardt (2001)					x	
Fischer (2007)						
Flowers (2004)			x		x	
Gellin (2003)			x			

Involvement Correlates continued

Source	Public Relations Classes	Friendship Quality, Loneliness,& Social Adaptation	Critical Thinking	Student Learning	Personal Development/ personal skills	College Attrition
Kuh & G(1995)						
Kuh & Gonyea (2006)					x	
Kuh (1995) Lundberg, Schreiner, Hovaguimian, Miller (2007) Moore... (1998) review of all research Ouimet…(2004) design of instruments					x	
P & T (1979) Pascarella (2006) broad overview				x		x
Pike & Kuh (2005)				x		
Schroeder & Hurst (1996)				x		
Svanum & Bigatti (2005)						

Involvement Correlates continued

Source	1st & 2nd Generation	Grades in a Course	General Education	Decision Making	Life/Campus Satisfaction	Cognitive Complexity
Pike (2006)	x					
Pike & Killian (2001)						
Pike, Kuh, Gonyea (2003						
Guiffrida (2004)						
Ahlfeldt & others (2005)	x					
Anaya (1996)		x	x			
Astin (1984)				x	x	x
Astin (1996)						
Baxter-Magolda (1992)					x	x
Benigni…(2002)						
Benjamin& Hollings (1995)						
Bohnert…(2007)						x
Cooper, Haley,Simpson(1994)						x
Cress, Astin, Zimmerman-Osster Bukhardt (2001)						
Fischer (2007)						x
Flowers (2004)						x
Gellin (2003)					x	x

Involvement Correlates continued

Source	1st & 2nd Generation	Grades in a Course	General Education	Decision Making	Life/Campus Satisfaction	Cognitive Complexity
Kuh & G(1995)						
Kuh & Gonyea (2006)	x					
Kuh (1995) Lundberg, Schreiner, Hovaguimian, Miller (2007) Moore... (1998) review of all research Ouimet…(2004) design of instruments						
P & T (1979) Pascarella (2006) broad overview				x	x	x
Pike & Kuh (2005)				x		x
Schroeder & Hurst (1996)				x		
Svanum & Bigatti (2005)						

Involvement Indicators

Source	Competency	Self Esteem	Artistic Interest	Liberalism	Hedonism	Spirituality
Pike (2006)						
Pike & Killian (2001)						
Pike, Kuh, Gonyea (2003						
Guiffrida (2004)						
Ahlfeldt & others (2005)						
Anaya (1996)		x				
Astin (1984)	x		x	x	x	
Astin (1996)						
Baxter-Magolda (1992)						
Benigni…(2002)						
Benjamin& Hollings (1995)						
Bohnert…(2007)						
Cooper, Haley,Simpson(1994)						
Cress, Astin, Zimmerman-Osster Bukhardt (2001)						
Fischer (2007)						
Flowers (2004)						
Gellin (2003)						

Involvement Correlates continued

Source	Competency	Self Esteem	Artistic Interest	Liberalism	Hedonism	Spirituality
Kuh & G(1995)						
Kuh & Gonyea (2006)	x					x
Kuh (1995)	x					
Lundberg, Schreiner, Hovaguimian, Miller (2007)						
Moore... (1998) review of all research						
Ouimet…(2004) design of instruments						
P & T (1979)						
Pascarella (2006) broad overview						
Pike & Kuh (2005)						
Schroeder & Hurst (1996)						
Svanum & Bigatti (2005)						

Involvement Indicators

Source	Religious Apostacy	Civic Responsibility	Leadership Skills	Values Clarification	Multicultural Awareness	Humanitarianism
Pike (2006) Pike & Killian (2001) Pike, Kuh, Gonyea (2003						
Guiffrida (2004) Ahlfeldt & others (2005)						
Anaya (1996)						
Astin (1984)	x					
Astin (1996) Baxter-Magolda (1992)						
Benigni…(2002) Benjamin& Hollings (1995)						
Bohnert…(2007) Cooper, Haley,Simpson(1994) Cress, Astin, Zimmerman-Osster Bukhardt (2001)		x	x	x	x	
Fischer (2007)						
Flowers (2004)						

Involvement Indicators continued

Source	Religious Apostacy	Civic Responsibility	Leadership Skills	Values Clarification	Multicultural Awareness	Humanitarianism
Gellin (2003)						
Kuh & G(1995) Kuh & Gonyea (2006)						
Kuh (1995)						x
Lundberg, Schreiner, Hovaguimian, Miller (2007)						
Moore... (1998) review of all research						
Ouimet…(2004) design of instruments						
P & T (1979) Pascarella (2006) broad overview						
Pike & Kuh (2005)						
Schroeder & Hurst (1996)						
Svanum & Bigatti (2005)						

Involvement Correlates continued

Source	GPA	Rate of Departure	Deep Learning	Arts and Humanities	Science and Technology	Writing Skills
Pike (2006)						
Pike & Killian (2001)						
Pike, Kuh, Gonyea (2003						
Guiffrida (2004)						
Ahlfeldt & others (2005)						
Anaya (1996)						
Astin (1984)						
Astin (1996)						
Baxter-Magolda (1992)						
Benigni…(2002)						
Benjamin& Hollings (1995)						
Bohnert…(2007)						
Cooper, Haley,Simpson(1994)						
Cress, Astin, Zimmerman-Osster Bukhardt (2001)						
Fischer (2007)	x	x				
Flowers (2004)				x	x	x
Gellin (2003)						

Involvement Correlates continued

Source	GPA	Rate of Departure	Deep Learning	Arts and Humanities	Science and Technology	Writing Skills
Kuh & G(1995)						
Kuh & Gonyea (2006)	x			x		
Kuh (1995) Lundberg, Schreiner, Hovaguimian, Miller (2007) Moore... (1998) review of all research Ouimet…(2004) design of instruments						
P & T (1979) Pascarella (2006) broad overview						
Pike & Kuh (2005)						
Schroeder & Hurst (1996)						
Svanum & Bigatti (2005)						

Involvement Correlates continued

Source	Academic Discipline	Friends from Home	Vocational Preparation	Race & Ethnicity
Pike (2006)				
Pike & Killian (2001)	x			
Pike, Kuh, Gonyea (2003				
Guiffrida (2004)		x		
Ahlfeldt & others (2005)				
Anaya (1996)				
Astin (1984)				
Astin (1996)				
Baxter-Magolda (1992)				
Benigni…(2002)				
Benjamin& Hollings (1995)				
Bohnert…(2007)				
Cooper, Haley,Simpson(1994)				
Cress, Astin, Zimmerman-Osster bukhardt (2001)				
Fischer (2007)				x
Flowers (2004)			x	x
Gellin (2003)				

Involvement Correlates continued

Source	Academic Discipline	Friends from Home	Vocational Preparation	Race & Ethnicity
Kuh & G(1995)				
Kuh & Gonyea (2006)				
Kuh (1995) Lundberg, Schreiner, Hovaguimian, Miller (2007) Moore... (1998) review of all research				
Ouimet…(2004) design of instruments				
P & T (1979)				
Pascarella (2006) broad overview				
Pike & Kuh (2005)				
Schroeder & Hurst (1996)				
Svanum & Bigatti (2005)				

Appendix B

STUDENT DEVELOPMENTAL TASK AND LIFESTYLE ASSESSMENT

by

Roger B. Winston, Jr., Ph.D.

Theodore K. Miller, Ed.D.

Diane L. Cooper, Ph.D.

Form 1.99

Appendix C

Questionnaire Cover Sheet

Project Title: Student Involvement Measurement Instrument

Investigators: Kelly D'Arcy, MS Jovette Dew, MS

This form outlines the purposes of this research activity and provides a description of your rights and responsibilities as a participant.

Project Description: The purpose of this project is to develop an instrument to measure the level of student involvement in college. Your participation is requested because you are a student in college at this time. Participants will be asked to complete a 10 minute self-report questionnaire. There are no known risks associated with this project that are greater than those ordinarily encountered in daily life. The collected data from the measurement of college students' involvement may lead to the following benefits:

*Awareness of at risk conditions
*Improved student involvement on campus.
*Improved student satisfaction
*Improved retention

Access will be limited to that of the researchers. No identifying information will be associated with the questionnaire. Completed questionnaires will be handled only by the researchers and will be stored in the locked offices of the one of the researchers. The completed questionnaires will be destroyed (shredded) upon the completion of the project (end of the current semester.) The OSU IRB has the authority to inspect records and data files to assure compliance with approved procedures.

There is no remuneration or compensation proved to research subjects.

If questions arise about the project, feel free to contact:

Kelly D'Arcy, MS
SOSU
PMB 2765
Durant, OK
(580)745-2948
kdarcy@sosu.edu

Jovette Dew, MS
OSU
101 Engineering North
Stillwater, OK
(405) 744-5276
jovette@okstate.edu

For information on subjects' rights, contact Dr. Carol Olson, IRB Chair, 415 Whitehurst Hall, 405-744-1676. Participation in this study is voluntary and you may discontinue answering the questions at any time. Although there are no known risks associated with participation in this study, if undue discomfort or anxiety is experienced as a result of this study, referral for counseling is available.

For each of the following items, circle the choice that best describes you. (Fill in the blank when appropriate.)

What University do you attend? OSU SOSU UCO

How many credit hours have you completed (not counting this semester)?
0-29 30-59 60-89 90+ (undergrad) 120+(graduate)

What is your major? _____

UCO: College of: Liberal Arts Education Business Administration
Mathematics & Sciences Art, Media & Design

SOSU: College of: Arts & Sciences Business Education & Behavioral Sciences

OSU: College of: Business Administration Human & Environmental Sciences
Education Engineering, Architecture & Technology
Arts & Sciences Agricultural Sciences & Natural Resource

Is this the first university that you have attended?
Yes

No. I transferred from a school that I attended just prior to attending this school.

No. I transferred from a school that I attended more than a year before coming to this school.

Other: _____

What is your age: 18-21yrs 22-25yrs 25yrs or older

What is your gender: M F

Are you:
single w/no children single with child(ren)
married w/no children married w/family

How many credit hours are you currently taking?
0-6 hrs 7-12 hrs 12-15 hrs 16+ hrs

1. How many university organizations are you currently an active member in?
    1. None
    2. 1 organization
    3. 2 organizations
    4. 3 organizations
    5. 4 or more organizations
2. Do you hold a leadership role in any university organizations?
    1. I do not belong to any organizations
    2. I belong to at least 1 organization, but am not in any leadership roles.
    3. I have accepted a committee membership.
    4. I have accepted a committee chair position.
    5. I am an officer in at least one organization.
3. How many new close college friends have you made since coming to college?
    1. I have not made any new friends.
    2. I have made one new friend.
    3. I have made 2 new friends.
    4. I have made several (3-4) new close friends.
    5. Most of my close friends (5 or more) have been made since coming to college.
4. How frequently have you visited a professor during his/her office hours?
    1. I have never visited a professor in his/her office.
    2. I have never visited a professor during office hours, but have stayed after class to talk with a professor.
    3. I have visited a professor in his/her office at least once this semester.
    4. I frequently visited my professor(s) in his/her office to discuss class work.
    5. I frequently stop by my professor(s) office just to chat, not necessarily about class work.
5. How frequently have you encountered one of your professors outside of the classroom or office hours?
    1. I have never talked to any professors outside of class.
    2. I have talked to a professor in his/her office or in the department office or hallway.
    3. I have talked to a professor on campus outside of the department.
    4. I have talked to a professor at a university activity.
    5. I frequently see and speak to one or more professor(s) at campus activities and events.
6. On average, how many hours per week do you spend outside of class with college friends, acquaintances or organizations?
    1. I spend all of my time in class, at work, and/or at home.
    2. I spend a few (less than 5) hours each week with college friends/organizations.
    3. I spend 5-10 hours each week with friends/organizations.
    4. I spend 11-20 hours each week with friends/organizations.
    5. I spend more than 20 hours each week with friends/organizations.

7. If you disagreed with a program or policy of the university what would you be likely to do?
    1. Just deal with it.
    2. I would complain to friends a lot.
    3. I would write a letter to the school newspaper complaining about the issue.
    4. I would attend a student government meeting to try to get them to address the issue.
    5. I would write a letter or attempt to speak to a university administrator about the issue.

8. How frequently do you go home?
    1. Never. (College is my home.)
    2. I do not go home during the semester, but do go home between semesters.
    3. Rarely, maybe once or twice during the semester.
    4. I frequently go home during weekends, once or twice each month.
    5. I go home just about every weekend, and sometimes during weeknights.

9. How often have you taken advantage of student support services, such as academic advising, tutoring, help centers, student counseling centers, career services, etc…
    1. Never
    2. Have visited one support service office at least once.
    3. Have visited more than one support office, but not frequently (2-3 times.)
    4. Have visited at least one support office several times (more than 3 times.)
    5. Have visited more than one support office on several occasions (more than 3 times.)

10. If you were struggling to understand a homework assignment, what would you be likely to do?
    1. Not complete it.
    2. Turn in what I could complete.
    3. Ask a friend/classmate for help.
    4. Ask academic support services or an older student that has taken the course for assistance.
    5. Ask the instructor for extra help.

11. How frequently do you attend campus events (such as athletics, theatre, concerts, etc.)
    1. Never
    2. I have attended 1-2 events during the semester.
    3. I usually attend at least one event each week.
    4. I frequently attend at least 2-3 events each week.
    5. I attend everything that I can (typically more than 3 events/week.)

12. Where do you live?
    1. On campus or in a university sorority or fraternity
    2. Off campus within walking distance
    3. Off campus within 1-2 miles of campus
    4. Off Campus 3-10 miles
    5. Off Campus more than 10 miles

13. How frequently do you take advantage of the campus fitness/wellness center
    1. Never.
    2. I have visited it once or twice during the semester.
    3. I have used it about once a week, on average.
    4. I regularly use the center 2-3 times each week.
    5. I regularly use the center just about every day.

14. How often do you read the campus newspaper?
    1. Never.
    2. I occasionally read an article.
    3. I usually scan for one section in most issue.
    4. I usually pick up most issues and scan for articles of interest.
    5. Every article in every issue.

15. On average, how many hours per week do you work at your on or off campus job?
    1. None
    2. 1-6 hours each week
    3. 7-12 hours each week
    4. 13-20 hours each week
    5. 20 + hours each week

16. Do you have an on-campus job?
    Yes No

17. Do you belong to a fraternity, sorority or PLC or are you an RA? (Check any that apply)
    ____ Fraternity or sorority
    ____ PLC
    ____ RA
    ____ Honors Program Participant
    ____ Intercollegiate athlete (member of any university athletic team)
    ____ None of the above

18. Is there any other area of college involvement that we have not asked you about?

    _____

    _____

    _____

    _____

Thank you for participating.

Appendix D

Student Involvement Inventory Southeastern Oklahoma State University March 4, 2009

1

DEMOGRAPHIC INFORMATION

On the first page of the Scantron General Purpose Answer Sheet, please provide your Name, Student ID Number, Grade, Sex, and Date of Birth in the spaces provided. For Grade, please use the following codes: 13 = FR; 14 = SO; 15 = JR; 16 = SR.

SPECIAL CODES

Please record your answers to the following questions in the space provided for Special Codes on page 1 of the Scantron General Purpose Answer Sheet

A. What is your marital status?
0. Single, never married
1. Married (including domestic partner)
2. Separated
3. Divorced
4. Widowed

B. What is the highest level of education that your mother completed?
0. Did not complete high school
1. Graduated from high school
2. Attended college, but did not complete degree
3. Completed an associate's degree (A.A., A.S., etc.)
4. Completed a bachelor's degree (B.A., B.S., etc.)
5. Completed a master's degree (M.A., M.S., etc.)
6. Completed a doctoral degree (Ph.D., J.D., M.D., Ed.D., etc.)

C. What is the highest level of education that your father completed?
0. Did not complete high school
1. Graduated from high school
2. Attended college, but did not complete degree
3. Completed an associate's degree (A.A., A.S., etc.)
4. Completed a bachelor's degree (B.A., B.S., etc.)
5. Completed a master's degree (M.A., M.S., etc.)
6. Completed a doctoral degree (Ph.D., J.D., M.D., Ed.D., etc.)

D. Where do you currently live?
0. On-campus residence hall
1. On-campus apartment, house, trailer (not with parent or spouse)
2. At home with parents
3. At home with spouse or spouse equivalent
4. Off-campus apartment, house, trailer (not with parent or spouse)
5. Fraternity or sorority house

E. Before coming to college, did you have regular access to a computer where you lived, worked or went to school?
0. Yes, daily
1. Yes, weekly
2. Yes, minimal
3. No

F. Do you expect to enroll for an advanced degree when or if you complete your undergraduate degree?
0. Yes

1. No
2
Please record your answers to the following questions in the space provided on side 2 of the Scantron General Purpose Answer Sheet
For questions 1-8, please indicate how you meet your college expenses according to the following scale: (*Fill in the response that best approximates the amount of support from each of the following sources*.)
A. None
B. Less than half
C. About half
D. More than half
E. All or nearly all
1. Self (e.g., from jobs or savings)
2. Parents
3. Spouse/Partner
4. Employer Supported
5. Scholarships or grants that are financial needs based
6. Scholarships or Grants that are skills or abilities based
7. Loans
8. Other Sources
For questions 9-11, please answer the following questions about the Counseling Center
9. Have you utilized the university's counseling center?
A. No (skip to Q12)
B. Yes (continue with Q10 & 11)
10. How satisfied are/were you with the assistance that you received?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
11. How significant is/was this assistance to your overall success in college?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
For questions 12-14, please answer the following questions about the Student Health Services
12. Have you utilized the university's Student Health Center?
A. No (skip to Q15)
B. Yes (continue with Q13 & 14)
13. How satisfied are/were you with the assistance that you received?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
3
14. How significant is/was this assistance to your overall success in college?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied

F. Moderately satisfied
G. Very satisfied

For questions 15-17, please answer the following questions about the Career Placement Center

15. Have you utilized the university's Career Placement Center?
A. No (skip to Q18)
B. Yes (continue with Q16 & 17)
16. How satisfied are/were you with the assistance that you received?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
17. How significant is/was this assistance to your overall success in college?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

For questions 18-20, please answer the following questions about Student Life/Student Activities/Multicultural Activities

18. Have you participated in any activities or programs offered by the Student Life Office (Student Life, Student Activities/Multicultural Student Activities?)
A. No (skip to Q21)
B. Yes (continue with Q19 & 20)
19. How satisfied are/were you with the assistance that you received?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
20. How significant is/was this assistance to your overall success in college?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

For questions 21-23, please answer the following questions about the Dean of Students/Student Services

21. Have you received assistance from the Dean of Student and/or the VP of Student Affairs?
A. No (skip to Q24)
B. Yes (continue with Q22 & 23)
4
22. How satisfied are/were you with the assistance that you received?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
23. How significant is/was this assistance to your overall success in college?
A. Very dissatisfied

B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

For questions 24-26, please answer the following questions about Residence Life

24. Have you lived in university residence halls?
A. No (skip to Q27)
B. Yes (continue with Q25 & 26)
25. How satisfied are/were you with the overall residential experience?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
26. How significant is/was this experience to your overall success in college?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

For questions 27-46, please indicate how much time you spend on average *per week* on the following activities according to the following scale:

A. 0 hours
B. 1-2 hours
C. 3-4 hours
D. 5-6 hours
E. 7-8 hours
F. 9-10 hours
G. More than 10 hours
27. Participating in Fraternity or Sorority meetings or events?
28. Participating in academic clubs or organizations?
29. Participating in intercollegiate athletics?
30. Participating in Intramural athletics?
31. Participating with a campus group in a service or volunteer activity?
32. Participating with other (not listed in 1-5 above) student organizations?
33. Attending campus athletic event(s)?
34. Attending lectures and/ or educational events (excluding regular class time)?
35. Attending musical/theatrical/artistic events (excluding regular class time)?
36. Attending cultural heritage events (excluding regular class time)?
37. Attending campus social events?
38. In the Campus Recreation/Fitness Facility?
39. Using the library?
5
40. In the Student Union attending organized activities, meetings or lectures?
41. In the Student Union socializing and/or hanging out with friends?
42. Utilizing student support services, such as the student health center, counseling center, career services, campus women's center, campus multicultural center, etc?
43. Utilizing student academic support services, such as tutoring, writing/math lab, academic advising, learning resource labs, student success centers, etc?
44. Studying and/or working on class projects with peers?
45. Socializing with friends/peers outside of classes or structured organizations/activities?
46. Socializing with family and/or non-college friends?

For questions 47-66, please indicate your level of satisfaction with the amount of time you have spent, on average, with the following activities according to the following scale:

A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

47. Participating in Fraternity or Sorority meetings or events?
48. Participating in academic clubs or organizations?
49. Participating in intercollegiate athletics?
50. Participating in Intramural athletics?
51. Participating with a campus group in a service or volunteer activity?
52. Participating with other (not listed in 1-5 above) student organizations?
53. Attending campus athletic event(s)?
54. Attending lectures and/ or educational events (excluding regular class time)?
55. Attending musical/theatrical/artistic events (excluding regular class time)?
56. Attending cultural heritage events (excluding regular class time)?
57. Attending campus social events?
58. In the Campus Recreation/Fitness Facility?
59. Using the library?
60. In the Student Union attending organized activities, meetings or lectures?
61. In the Student Union socializing and/or hanging out with friends?
62. Utilizing student support services, such as the student health center, counseling center, career services, campus women's center, campus multicultural center, etc?
63. Utilizing student academic support services, such as tutoring, writing/math lab, academic advising, learning resource labs, student success centers, etc?
64. Studying and/or working on class projects with peers?
65. Socializing with friends/peers outside of classes or structured organizations/activities?
66. Socializing with family and/or non-college friends?

For questions 67-72, please indicate how frequently you have done the following *during the current semester* according to the following scale:

A. Never
B. 1-2 times
C. 3-4 times
D. 5-6 times
E. 7-8 times
F. 9-10 times
G. More than 10 times

67. Visited with a faculty member during scheduled office hours?
68. Encountered a faculty member outside of class/office hours?
69. Participated with other students in a discussion with one or more faculty members outside of class?
70. Participated with other students in a discussion with one or more university staff members?
71. Discussed your career plans and ambitions with a university staff member?
72. Discussed your career plans and ambitions with a faculty member?

6

For questions 73-78, please indicate your level of satisfaction with the amount of time you have spent doing the following activities *during the current semester* according to the following scale:

A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

73. Visited with a faculty member during scheduled office hours?
74. Encountered a faculty member outside of class/office hours?
75. Participated with other students in a discussion with one or more faculty members outside of class?

76. Participated with other students in a discussion with one or more university staff members?
77. Discussed your career plans and ambitions with a university staff member?
78. Discussed your career plans and ambitions with a faculty member?
79. On average, how many times do you go home to visit your family during a semester? (If you are in your first semester of college, how many times do you plan to go home during this semester?)
A. Never
B. 1-2 times
C. 3-4 times
D. 5-6 times
E. 7-8 times
F. 9-10 times
G. More than 10 times
80. On average, how satisfied are you with how many times you go home to visit your family during a semester? (If you are in your first semester of college, how satisfied are you with how many times you plan to go home during this semester?)
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

For questions 81-89, please indicate how many semesters you have done the following *prior to this semester* according to the following scale:

A. None
B. 1
C. 2
D. 3
E. 4
F. 5
G. More than 5
81. Lived on campus?
82. Lived with friends within 5 miles of campus?
83. In how many organizations do you currently (during the current semester) participate?
84. In how many organizations do you currently (during the current semester) hold a leadership position?
85. On average, how many times each week do you encounter a member of the faculty, staff or administration who greets you by name?
86. On average, how many times each week do you encounter a peer, who is not a close friend, who greets you by name?
87. Since coming to college, how many organizations/groups have you joined because the group's membership have a similar background, faith, beliefs, ethnicity, gender, nationality, orientation, etc?
88. On average, how many times each week do you interact with a peer from a different racial or ethnic group?
89. How many additional organizations would you consider joining, if they met when you were typically on campus?
7

For questions 90-98, please indicate your level of satisfaction with how often you have done the following *prior to this semester* according to the following scale:

A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
90. Lived on campus?
91. Lived with friends within 5 miles of campus?
92. In how many organizations do you currently (during the current semester) participate?
93. In how many organizations do you currently (during the current semester) hold a leadership position?
94. On average, how many times each week do you encounter a member of the faculty, staff or administration who greets you by name?

95. On average, how many times each week do you encounter a peer, who is not a close friend, who greets you by name?
96. Since coming to college, how many organizations/groups have you joined because the group's membership have a similar background, faith, beliefs, ethnicity, gender, nationality, orientation, etc?
97. On average, how many times each week do you interact with a peer from a different racial or ethnic group?
98. How many additional organizations would you consider joining, if they met when you were typically on campus?
99. How far do you currently live from campus?
A. 0 miles
B. Less than 1 mile
C. 1 mile to less than 5 miles
D. 5 miles to less than 10 miles
E. 10 miles to less than 30 miles
F. 30 miles to less than 60 miles
G. More than 60 miles
100. How satisfied are you with how far you currently live from campus?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
For questions 101 and 102, please indicate how many hours you spend each week on average doing the following activities according to the following scale:
A. None
B. 1-5 hours
C. 6-10 hours
D. 11-15 hours
E. 16-20 hours
F. 21-25 hours
G. More than 25 hours
101. Working in an on-campus job?
102. Working in an off-campus job?
For questions 103 and 104, please indicate your level of satisfaction with the amount of time you have spent doing the following activities according to the following scale:
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied
8
103. Working in an on-campus job?
104. Working in an off-campus job?
105. How much time do you spend on average *per week* reading the campus newspaper and other campus publications?
A. None
B. 1-10 minutes
C. 11-19 minutes
D. 20-29 minutes
E. 30-39 minutes
F. 40-49 minutes
G. More than 50 minutes
106. How satisfied are you with the amount of time you spend on average *per week* reading the campus newspaper and other campus publications?
A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied

D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

For questions 107-109, please indicate the average commute from your resident to the following location according to the following scale:

A. None
B. 1-10 minutes
C. 11-19 minutes
D. 20-29 minutes
E. 30-39 minutes
F. 40-49 minutes
G. More than 50 minutes

107. Class
108. Academic support services (such as tutoring, writing/math lab, academic advising, learning resource labs, student success centers, etc.)
109. Student Support Services (such as student health center, student counseling center, career services, campus women's center, campus multicultural center or academic services).

For questions 110-112, please indicate your level of satisfaction with the amount of time of your average commute from your resident to the following locations according to the following scale:

A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

110. Class
111. Academic support services (such as tutoring, writing/math lab, academic advising, learning resource labs, student success centers, etc.)
112. Student Support Services (such as student health center, student counseling center, career services, campus women's center, campus multicultural center or academic services).

9

For questions 113 and 114, please indicate how much time you have spent in the following activities *during your college career* according to the following scale:

A. None
B. 1-59 hours
C. 60-119 hours
D. 120-179 hours
E. 180-239 hours
F. 249-299 hours
G. More than 300 hours

113. Internship/practicum hours
114. Working with faculty on undergraduate research projects

For questions 115 and 116, please indicate your level of satisfaction with the amount of time you have spent doing the following activities *during your college career* according to the following scale:

A. Very dissatisfied
B. Moderately dissatisfied
C. A little dissatisfied
D. Neutral
E. Minimally satisfied
F. Moderately satisfied
G. Very satisfied

115. Internship/practicum hours
116. Working with faculty on undergraduate research projects

FINAL COMMENTS

Please provide any comments that you have regarding the survey on the first page of the Scantron General Purpose Answer Sheet. If you would be willing to be contacted for a follow-up interview, please provide your first name and a telephone number where you can be reached. Thank you for your participation!

Appendix E

SOUTHEASTERN
A CENTURY OF BUILDING FUTURES

February 2, 2009

Dear Southeastern Student:

Effective with the Spring 2003 semester, Southeastern implemented a change in its testing procedures for the mid-level assessment program. This change requires a select group of Freshmen, Sophomores, Juniors, and Seniors to take the ACT CAAP sub-tests in Reading, Critical Thinking and Writing Essay. Included this spring you will also take the Student Development Task and Lifestyle Assessment (SDTLA) survey and the Student Involvement Instrument (SII).

For the Spring you were randomly selected from a group of your peers. You will be administered the sub-test in Writing Essay, and the two survey instruments, on Wednesday, March 4, 2009, from 1:30 p.m. to 3:30 p.m.

Several points need to be emphasized at this time. First, your test scores will give you, and the University, personal feedback about your General Education knowledge and basic skills, and your satisfaction with your student experience at Southeastern. Second, you are encouraged to do your best on the test because the aggregate results will enable Southeastern to identify strengths and weaknesses, and if necessary, make changes in the General Education program and in the student experience here on campus. Third, your instructors, professors, and advisors will have access to the scores, and may take them into consideration when they write letters of recommendation on your behalf. Fourth, if you miss the test you will not be allowed to enroll next semester. A make-up date will be set. It will be your responsibility to contact Bridgette Hamill at 580-745-2208, or Dr. Charles Weiner at 580-745-2202, to find out when the make-up date is scheduled. The ultimate goal of assessment is the improvement of student learning.

The subtest will be administered in the Visual and Performing Arts Center. If you have any questions in regard to the testing procedures, or if you took one of the subtests last semester, you can call either Ms. Hamill or Dr. Weiner at the numbers listed above. Please do not wait until the week and/or day before the test to call. We will need enough time to replace you. Failure to give us the time that we need will require your participation in the test administration. Classes beginning at 4:00 p.m. will be held.

Your serious participation in assessment will help build a better Southeastern and enhance the value of your academic degree. To encourage student participation, over $3,700 in tuition waiver scholarships will be awarded to qualified students scoring the highest on each mid-level assessment test.

Sincerely,

Charles Weiner, Ed.D.
Assistant Vice President for Academic Affairs/
Director of Student Learning and Institutional Research

/blh

Appendix F

From: Sharon Robinson
Sent: Sunday, March 01, 2009 4:45 PM
Subject: Assessment Day Testing 11:00-1:00

On February 2, 2009 you received a letter from Dr. Charles Weiner, Assistant Vice President for Academic Affairs, advising you of your selection to participate in the mid-level assessment program. Since this program randomly selects groups of freshmen, sophomores, juniors and seniors, many of you have taken one or more of these tests before. I have talked to some of you who have asked why you have to keep taking them. I want to re-emphasize points made by Dr. Weiner in his earlier letter to you. He made 4 excellent points which I will re-state:

1. Your test scores will give you, and the University, feedback about your General Education knowledge and basic skills. It will also measure your satisfaction with your student experience here at Southeastern.
2. You are encouraged to do your best because we use the results to identify strengths and weaknesses in our General Education program and our student life programs.
3. Your instructors, professors, and advisors will have access to the scores. If you do very well, they may take that into consideration when you ask for letters of recommendation.
4. If you miss the test, you will not be allowed to enroll next semester. A make-up date will be set. By this time, you should have called Bridgette Hamill at 580 745-2208 if you already took one of the subtests last semester. Failure to have done so means that you must participate in the test administration.

Testing will take place in the Visual and Performing Arts Center (VPAC) from 11:00 AM – 1:00 PM on Wednesday, March 4, 2009. Please arrive on time for your test. Your serious participation in assessment will help your University and will add value to your degree. Students scoring the highest on each mid-level assessment test will be eligible to receive a tuition waiver scholarship.

This semester we are offering two additional tests. You will take the Student Development Task and Lifestyle Assessment (SDTLA) survey and the Student Involvement Instrument (SII) in addition to one of the ACT CAAP sub-tests in Reading, Critical Thinking or Writing Essay. I am very excited about the addition of these assessment tools. The area of Student Affairs has been actively striving to provide a living and learning environment that compliments your academic achievement. We have been working on our assessment of student development in our Division in preparation for the next Higher Learning Commission accreditation visit. It is important that we have good data to present that supports our work. Your participation in this survey will be the first step.

The Student Affairs Division joins Academic Affairs in thanking you for your participation and for putting forth your very best efforts. We will be providing food, snacks and beverages for each test time. We know this is not the way you would choose to spend two hours of your day, so we are trying to make it less painful. Enjoy the food and do your best. We appreciate you!

Sincerely,

Sharon Robinson
Vice President for Student Affairs

Please note my new email address and new website address for Southeastern Oklahoma State University:

Sharon Robinson
Vice President for Student Affairs
1405 N. Fourth Ave., PMB 4159
Durant, OK 74701-0609
Office: 580.745.2368
Fax: 580.745.7466
srobinson@SE.edu www.SE.edu

Appendix G

Institutional Review Board

From: IRB
Sent: Tuesday, June 29, 2010 10:36 AM
To: Dew, Jovette
Cc: Fuqua, Dale
Subject: IRB Application

Dear Jovette:

Thank you for submitting an IRB application for your research, *Positive and Negative Aspects of Student Involvement on Academic Achievement*. Because you will not be accessing or receiving identifiable private information about individuals your research does not involve human subjects as defined by the federal regulations and therefore, does not require IRB review.

If you would like more official documentation of this decision for your files you are welcome to complete a Request for Determination of Non-Human Subject or Non-Research form found on the IRB webpage at http://compliance.vpr.okstate.edu/IRB/forms.aspx. However, this is not required.

Please feel free to contact me with any questions or concerns.

Best of luck with your research,

Beth McTernan, CIP
IRB Manager
Oklahoma State University
219 Cordell North
Stillwater, OK 74078-1038
Phone: 405.744.5700
Fax: 405.744.4335
Email: beth.mcternan@okstate.edu

Appendix H

Factor Loadings for Exploratory Principal Axis Analysis with Oblimin Rotation and Communalities for Satisfaction Items

Item	Factor 1 CRF	Factor 2 SCI	Factor 3 PROX	Factor 4 SOC	h^2
S II47 Fraternity/Sorority Participation	.30 (-.04)	**-.77** **(-.73)**	.18 (.02)	.42 (.13)	.61
S II48 Clubs/organization Participation	.36 (.06)	**-.89** **(-.89)**	.15 (-.05)	.35 (-.04)	.79
S II51 Service Activities Participation	.38 (.08)	**-.92** **(-.93)**	.18 (-.03)	.33 (-.08)	.85
S II52 Other Organization Participation	.35 (.02)	**-.88** **(-.88)**	.19 (-.00)	.36 (-.01)	.78
S II92 Semesters of Organization Involvement	**.48** **(.06)**	**-.67** **(-.46)**	.44 (.24)	**.62** **(.34)**	.65
S II93 Number of Leadership Positions	**.52** **(.12)**	**.72** **(-.52)**	.40 (.17)	**.60** **(.29)**	.68
S II103 Hours Working in Campus Job	.35 (.05)	**-.53** **(.43)**	.34 (.20)	.36 (.11)	.35
S II100 Living Distance From Campus	.20 (.02)	-.06 (.07)	.41 (.39)	.18 (.11)	.18
S II110 Commute From Residence to Class	.36 (.08)	-.14 (.05)	**.67** **(.63)**	.24 (.07)	.46
S II111 Commute From Residents to Academic Services	.41 (.01)	-.30 (-.15)	**.92** **(.92)**	.18 (-.12)	.88
SII112 Commute From Residents to Student Services	.42 (.00)	-.32 (-.17)	**.96** (.96)	.17 (-.14)	.96

(Continued)

Item	Factor 1 CRF	Factor 2 SCI	Factor 3 PROX	Factor 4 SOC	h^2
S II73 Faculty Office Visit	**.74**	-.25	.31	.31	.56
	(.78)	(.03)	(-.00)	(-.06)	
S II74 Faculty Not Scheduled Visits	**.84**	-.38	.40	.39	.73
	(.82)	(-.08)	(.05)	(-.06)	
S II75 Faculty Discussions	**.85**	-.38	.31	.31	.73
	(.85)	(-.06)	(-.07)	(.01)	
S II76 Staff Discussions	**.85**	-.42	.32	.32	.74
	(.84)	(-.12)	(-.06)	(-.02)	
S II77 Staff Career Plans Discussion	**.86**	-.27	.38	.38	.75
	(.86)	(.08)	(.02)	(.05)	
S II78 Faculty Career Plans Discussion	**.83**	-.29	.42	.42	.72
	(.78)	(.08)	(.07)	(.13)	
S II65 Socializing Outside of the Classroom	.13	-.24	-.05	-.05	.18
	(-.01)	(-.12)	(-.17)	(.38)	
S II94 Student Recognition by Faculty	**.52**	-.28	.41	**.41**	.66
	(.18)	(.11)	(.18)	**(.69)**	
S II95 Student Recognition by Peers	**.46**	-.38	.29	.29	.69
	(.11)	(-.01)	(.05)	(.75)	
S II97 Cultural Interaction	.41	-.47	.39	**.39**	.53
	(.02)	(-.20)	(.21)	**(.52)**	
Sum of Squared Loadings	8.39	2.37	1.67	1.04	
Percent of Variance	39.96	11.18	7.97	4.97	

VITA

Jovette Regina Dew

Candidate for the Degree of

Doctor of Philosophy

Dissertation: THE POSITIVE AND NEGATIVE ASPECTS OF STUDENT INVOLVEMENT ON ACADEMIC ACHIEVMENT

Major Field: Educational Psychology – Research, Evaluation, Measurement, & Statistics

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Educational Psychology: Research, Evaluation, Measurement and Statistics at Oklahoma State University, Stillwater, Oklahoma in December, 2010.

Completed the requirements for the Master of Science in Counseling and Student Personnel at Oklahoma State University, Stillwater, Oklahoma in 2001.

Completed the requirements for the Bachelor of Science in Industrial Engineering and Management at Oklahoma State University, Stillwater, Oklahoma in 1989.

Experience: Employed as Coordinator of the Multicultural Engineering Program and Academic Advisor, College of Engineering Architecture and Technology by Oklahoma State University while pursuing the Master of Science degree. Employed by Oklahoma State University as Director of Diversity Academic Support from August 2006 to present.

Professional Memberships: ACPA College Student Educators International

Name: Jovette Regina Dew Date of Degree: December, 2010

Institution: Oklahoma State University Location: Stillwater, Oklahoma

Title of Study: POSITIVE AND NEGATIVE ASPECTS OF STUDENT INVOLVEMENT ON ACADEMIC ACHIEVEMENT

Pages in Study: 132 Candidate for the Degree of Doctor of Philosophy

Major Field: Educational Psychology (Research, Evaluation, Measurement, & Statistics)

Scope and Method of Study: The focus of this study was to examine the empirical structure of student involvement and the relationship of that structure to academic achievement measures. Participants in this study included 360 students at a regional Midwestern university. Exploratory factor analysis and multiple correlation techniques were used to explore the research questions presented in the study.

Findings and Conclusions: The student involvement structure comprised of a four factor solution. The factors were Structured Campus Involvement, Campus Resources and Facilities, Proximity to Campus, and Social Connections. The structure was related to academic measures including GPA and CAAP scores on Critical Thinking and Writing. The activity level of student involvement has a positive relationship with GPA, however, the satisfaction with activity level had a positive relationship with GPA, CAAP Critical Thinking, Essay 2 and Essay combined. Multiple comparisons revealed differences on the satisfaction scale between freshmen and juniors on Total Scores Campus Resources and Facilities and Total Scores Structured Campus Involvement. Also, differences were found on the satisfaction scale between and freshmen and seniors on Total Scores Social Connections and Total Scores Campus Resources and Facilities.

ADVISER'S APPROVAL: Dr. Dale Fuqua